

KANSAS FARMER

Volume XLIV. Number 13

TOPEKA, KANSAS, MARCH 29, 1906

Established 1863. \$1 a Year

EXTRACT MAN AND WATCH DOG.

EDITOR KANSAS FARMER:—I had a large St. Bernard watch dog. He had never bitten anyone and was not called a cross dog. He never liked tramps or peddlers. He would never hurt them if they stopped when he went to them. I kept him for protection for the feminine portion of the family as they were alone quite often and we live just a half mile from the railroad track and tramps are always plentiful. One day an extract man came. The dog ran up to him, when he was just a few steps from the porch, but the man came on. The dog knew that there were no men at home and was not going to let him come in. He grabbed him by the arm and left the print of his teeth. He never lost any work on account of the attack. One day he came and made me three propositions. (1) Pay him \$50. (2) Arbitrate. (3) Kill the dog. If I would not do any one of these he would sue me. He claimed I should have had up a sign "Cross Dog" when the dog was known to be cross. Had he any right to make me do any one of these as long as the dog was in my yard? P. B. BALBY.

Sedgwick County.

Under the conditions stated by this correspondent the "extract man" has no legal right to make any demand on the owner of the dog or on anybody else on account of what the dog is reported to have done. The case is not legally different from several others that may be mentioned to make the situation clear. If the extract man had found our correspondent's bull at large in the yard, and, laying aside discretion, had disregarded the hoarse bellowing of the bull as he lowered his head and came at the extract man, took him upon his horns, and tossed him over the fence, would the extract man expect pay for his torn pants or broken arm as the case might have been? Again, if our correspondent's mule had been browsing between the gate and the house near the walk, and, on the approach of the extract man, had turned his business members toward the walk, and had exercised them just as the extract man passed, breaking the extract man's leg and disfiguring his countenance, would anybody suppose that the extract man had a legal right to have \$50 damages, an arbitration, or to demand that the valuable mule be killed?

Besides his general legal right as a dog to do anything in Kansas except to worry sheep, this dog was doing a service for which his owner had a legal right to keep him. Besides having a legal right to go everywhere else, he had a peculiar and especial right to be on guard at his owner's premises. The dog was there by legal right; the extract man by courtesy only. If our correspondent should feel disposed to fill his yard with cross dogs so that none might enter, he might be chargeable with discourtesy towards the rest of mankind, but no law would prevent.

The right to guard ones domicile is well illustrated by a case that is just now occupying a good deal of public attention. John D. Rockefeller, the head of the oil trust, is wanted as a witness in some matters that are under investigation in court. He remains in his home, has it guarded, and admits no one who could be suspected of being a server of subpoenas. Up to this time he has thwarted all efforts

of the officers to see him. "His house is his castle," etc., and "the king, unbidden, may not enter."

Such is the legal aspect of the case. The extract man is not likely to sue. But, treat him kindly, buy a year's supply of extracts from him, and, if they are good extracts, speak of their excellence to the neighbors, but so long as the dog is needed keep him on guard.

A NEW GRASS.

The new Teneriffe Canary grass seems to be attracting a great deal of attention throughout the country, and believing that our subscribers would be interested in testing this new candidate for public favor, we have made arrangements with the introducers to

York City, telling what you want to build and asking for a copy of the above named book.

For our correspondent's purpose, a concrete made of 1 part Portland cement, 2½ parts clean sand and 5 parts broken stone will be found satisfactory. Or a very good wall may be made by using 1 part Portland cement and 3½ or 4 parts clean sand.

On a tight platform, or in a mixing-box, scatter the cement over the sand; shovel the materials to one end and then to the other until thoroughly mixed as will be shown by the uniform color of the mixture. If broken stone be used, wet the stone thoroughly, throw it on top of the cement and sand mixture and turn it at least three times with the shovel. At the second

can be brought to full height at one operation.

A usual mistake with beginners is to underestimate the pressure of the concrete upon the forms, with the result that these often give way. This is especially liable to happen when the materials are tamped.

THE HUSBAND'S INHERITANCE.

EDITOR KANSAS FARMER:—Question 1. Please tell us through the next issue of your paper, when the law took effect in Kansas, making a husband heir to one-half of his wife's property at her death, if he survives her.

Question II. If a widow, who has property, marries again and still keeps that property in her name and has no children by this second husband, can this man come in as an heir to this property? If so, to what extent?

A KANSAS FARMER READER.

Greenwood County.

Section 5 of Chapter 63, Acts of 1859, provides that after payment of debts, one-half in value of all the real estate, of the husband, shall at his death be inherited by his wife, if she survives him.

Section 29 of said chapter says: "All the provisions hereinbefore made, in relation to the widow of a deceased husband, shall be applicable to the husband of a deceased wife. Each is entitled to the same rights or portion in the estate of the other, and like interests shall in the same manner descend to their respective heirs.

These provisions of Sections 5 and 29 of the Act of 1859 were embodied in Sections 8 and 28 of the Act of October 31, 1868. The Act of 1868 is still in force.

The second question is substantially answered in a decision of the Kansas Supreme Court, 52 K. 392.

"An intestate, who was three times married, by his first wife had one child, by his second wife one child, by his third wife, surviving him, he had five children. At his death one-half in value of his real estate, not necessary for the payment of his debts, descended in fee simple to his widow, and the other half to his seven children equally. Upon the death of the widow, his estate descended to his own children."

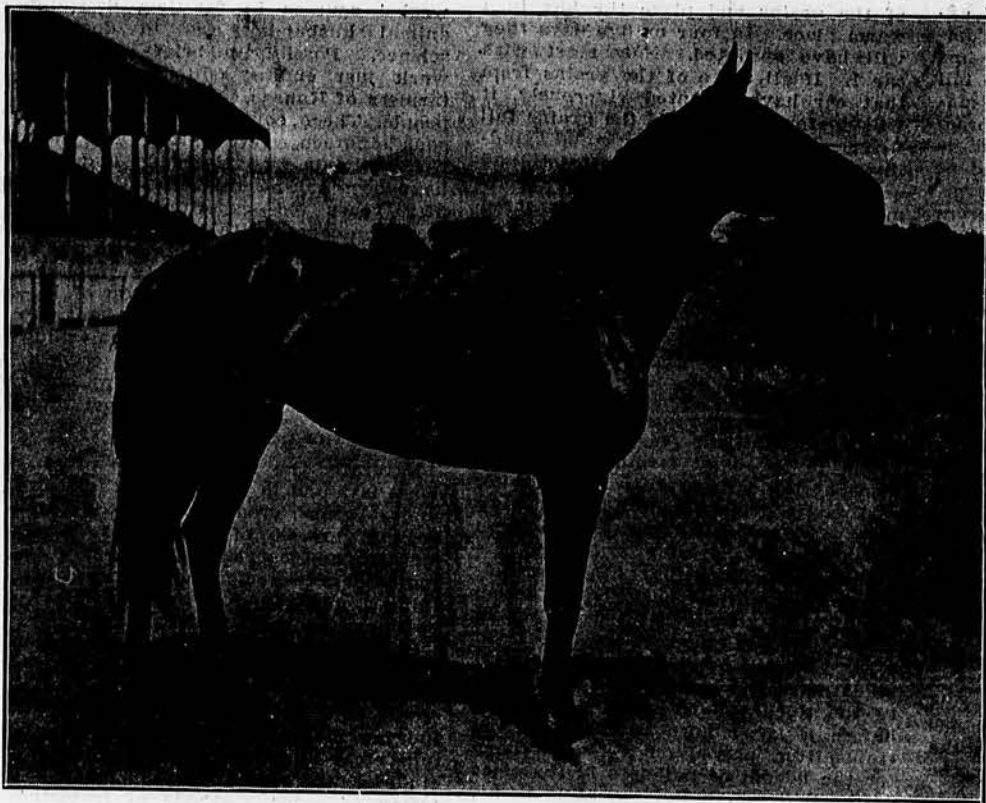
In case there are no children and no will, the survivor, whether husband or wife, inherits all the property not necessary for the payment of debts. In any case the survivor in Kansas inherits half.

RECIPROCITY—RAILROAD QUESTIONS.

In a letter to the Editor dated at his "Hill Crest Alfalfa and Feeding Farm," Hon. Thos. M. Potter says:

"I have read with much interest your reprints on the tariff reform along the lines of the American Reciprocal Tariff League. I wish you would impress upon your readers the importance of the Republican party recognizing the great agricultural interest of the West by placing a plank in its platform favoring reciprocity, and another plank recommending abolishment of the pass, and providing for passenger service at two cents a mile; also providing for a commission whose decisions should be final and immediately effective until reversed by the courts if upon review the rate fixed were found to be confiscatory."

THE KANSAS FARMER has no desire



GENERAL EVANS 13166

Head stallion James Stock Farm included in sale at Fair Grounds Topeka, April 3, 1906.

send a small sample of the seed free to any of our readers who desire it. A postal card request addressed to the Iowa Seed Co., Des Moines, Iowa, is sufficient, providing you mention this paper, and they will also send directions for culture and a copy of their large illustrated seed catalogue. It is claimed that Teneriffe Canary grass has produced over \$60.00 worth of seed per acre besides an excellent hay crop, and we believe that it will pay all farmers to give it a trial.

CONCRETE WALL FOR CELLAR.

EDITOR KANSAS FARMER:—I want to build a cellar, 9x12x7, with wall 8 inches thick. Please inform me how to mix concrete and apply for best results. I would like to build 3 feet and raise my box. Will it stand or shall I make a box the full height? Please answer through the KANSAS FARMER.

Miami County. J. M. EDWARDS.

Every person who intends to build concrete work of any kind should secure a copy of "Concrete Construction about the Home and on the Farm." Write a postal card to the Atlas Portland Cement Co., 30 Broad street, New

York City, telling what you want to build and asking for a copy of the above named book. For our correspondent's purpose, a concrete made of 1 part Portland cement, 2½ parts clean sand and 5 parts broken stone will be found satisfactory. Or a very good wall may be made by using 1 part Portland cement and 3½ or 4 parts clean sand.

On a tight platform, or in a mixing-box, scatter the cement over the sand; shovel the materials to one end and then to the other until thoroughly mixed as will be shown by the uniform color of the mixture. If broken stone be used, wet the stone thoroughly, throw it on top of the cement and sand mixture and turn it at least three times with the shovel. At the second

The form may be made 3 feet or 3½ feet high, filled to that height, left over night, raised the next day and the work continued. It is also quite possible to build the wall on only one side or two sides at a time. In this way less material will be required for the "form." Or, the one side or two sides

to enter partizan politics. It is willing, however, to say that Mr. Potter's suggestions are a reminder of the little-used doctrine that the farmer is entitled to consideration in arranging tariff schedules. Doubtless it is now time for a farmers' inning in tariff legislation. The great reciprocity convention, which resulted in the formation of the American Reciprocal Tariff League, made it plain that the protective-tariff policy is conceded to be permanently established. Even ex-Senator Harris of Kansas accepted this doctrine on the floor of the convention. But to be fair, this protective tariff should protect markets for the farmer as well as for the manufacturer. To secure such protection for the farmer is the object of the league. Every voter should see that his interests in a "square deal" are duly impressed upon the political organization to which he belongs.

This is a time of breaking away from bosses and all dictation in matters political. The voter need no longer fear for the consequences of acting according to the dictates of his conscience regardless of what the so-called "business interests" of the East, or anywhere else, may say.

But it is not so much political fear as it is political apathy that causes the farmer to neglect his interests in a political way. Whenever the time shall come that four-fifths of the farmer voters shall attend the primaries, and shall take active parts in their proceedings, evincing a proper understanding of measures as affecting their interests, it will be found that politicians, whether in office or wanting to get in, will be very careful for farmers' views.

The extent and influence of the pass evil is little realized. The time is coming when a person holding public office will be as much disgraced if found holding and using a railroad pass, as if found accepting a bribe of any other kind. The question of extending favors of the Inter-State Commerce Commission is now the "unfinished business" in the U. S. Senate. The bill passed the House by a very large majority. It has the powerful endorsement of President Roosevelt. It is conceded by all that no other president ever has had so much influence as he. Doubtless some extension of the powers of the commission will be made. The matter has passed beyond the realm of newspaper discussion. Those who wish now to promote any view of the matter should write to Senator C. I. Long, Washington, D. C. expressing their views and presenting their arguments.

Reports indicate that the convention to be held at St. Louis on April 16 and 17 under the auspices of the Southwest Promotion club is to be a great gathering. Those wanting detailed information should write to Hon. Nathan Frank, chairman of the executive committee.

BLOCKS OF TWO.

The regular subscription price of THE KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year with one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address: The Kansas Farmer Company, Topeka, Kans.

Miscellany

Observations.

EDITOR KANSAS FARMER:—Here are a few observations on articles from the issues of March 8 and 15 of THE KANSAS FARMER.

In the issue of March 8 in the article "Among Some Flowers of Easy Culture," by Jeanette Brown, I should have included zinnias in the collection. They are very hardy and tough, very free flowering, and make a fine blaze of different colors. The flowers grow both single and double in size and bloom from early summer until the severe frosts in the fall.

Pocket gophers are easily trapped, and without any bait. Open the runway at the newest made mound and put in

a trap. Cover over the trap, but leave a small hole open for light beyond the trap. The gopher comes to investigate, walks over or into the trap, and is caught.

Farmers on rural routes would find the parcels post of great convenience in many ways. Hurry it along.

In my opinion, based on my father's knowledge with my own little experience, Chas. H. Jackson is correct in his statements in regard to the warbles and ox bot fly. I have watched the big blue-black fellow many times. I have seen the cattle run with their tails held out and up in a peculiar fashion, it being claimed that the tail was held up for a bait for the fly to strike at instead of their backs. The fly strikes the back and lays the eggs under the hide. During the winter and spring a person can feel them and very often squeeze out the most forward ones. These flies will create a miniature stampede among cattle by buzzing near them.

Ed. A. Lord.
Kingman County.

Select Seed-Corn Now.

F. B. Mumford of the Missouri Agricultural College calls attention to the fact that farmers might with greater profit select seed-corn before spring work begins. Numerous investigations, he says, have shown that in the average year, a Missouri corn-field has 75 per cent of a stand. That is to say, the Missouri farmer will plant and cultivate 100 acres of corn and harvest 75. The cause of this is poor seed. He offers this simple method of testing seed-corn: Put several old newspapers in the bottom of a box and wet them. Then spread a white cloth with check-board squares on top of the paper, each square being numbered. Now number the ears to correspond with the squares. Take three grains from each ear and place them on the cloth in the square bearing the same number as the ear. Put another cloth on top of the grains and place the box in a warm place. In four or five days they will have sprouted. Now start with ear 1. If all three of the grains from that ear have sprouted vigorously, it will do for seed, but if the grains fail to germinate or show weak and spindling sprouts, throw the ear aside, and so on for every ear. In this way, almost a perfect stand can be secured which means a much larger yield per acre.

A Long-Distance Concert.

Imaginative writers have pictured wonderful possibilities of the telephone. Serious people have deemed it a waste of time to read of the things forecasted to result from the use of the lines connecting the little instruments now found in so many farmhouses. That some of the wildest dreams are being realized is evidenced in the following from a correspondent of the American Telephone Journal of Feb. 10.

"Some time ago the author participated in a musical performance given by two players separated by many miles, with the audience located at yet a third distant point. The author, provided with a hand-receiver connected to the telephone circuit and standing before a large horn attached to the transmitter, played on a French horn for the benefit of listeners in the office of the Spokesman-Review, at Spokane, Wash., 726 miles from Salt Lake City, in which place he was located.

"The remarkable feature of the performance was that the piano accompaniment was played by a music dealer named Reeves at his store in Helena, Mont., 525 miles away. A transmitter, equipped with a megaphone, was mounted on top of the piano and this player also wore a head-receiver.

"In playing the Miserere, from Ill Trovatore, for instance, your correspondent waiting in Salt Lake City, could hear Mr. Reeves play the introduction, and then being well acquainted with the score, knew just when to begin the melody. Then at the close of the strain, he would listen until the intermezzo had been played on the piano up at Helena, and then begin again. There was not the slightest jar between horn and piano during the entire program, and people listening along the line thought both instruments were being played in the same room. Your correspondent serenaded the adjutant's office at Fort D. A. Russell and the offices of the Cheyenne newspaper 500 miles distant, and one night was gotten out of bed at 11 o'clock to serenade numerous central offices of the company scattered through the southern part of Utah. General Manager Murry was much interested in these experiments, and afforded every facility for their conduct. When satisfactory con-

nections are made with the Pacific Coast, an effort will be made to serenade the newspaper offices of several coast cities from Salt Lake. It is believed that the experiment could be carried on with success with Omaha, and even points east of that city.

"An attempt was made by the telephone engineers to locate transmitters in front of the great organ in the Salt Lake Tabernacle, and reproduce organ recitals at points along the system, but the Mormon Church authorities were not favorable to this, and the experiments were cut short before they had been perfected."

Educating Young Farmers.

EDITOR KANSAS FARMER:—Within the last ten years nothing has been so marked in the educational world as the many efforts being made for the education of the farmers of the West. The attendance at the Agricultural Colleges has greatly increased, the legislative appropriations have been more and more liberal, and the strictly agricultural, stock, and horticultural courses have easily taken the highest and most popular rank in these colleges.

The farmers' institute work has taken on new importance and popularity. In Kansas this year more than one hundred farmers' institutes have been held since last September with an aggregate attendance of nearly twenty thousand farmers. Not only did the Agricultural College assist in these institutes, but it sent a corps of its workers in a special train, through the courtesy and liberality and far-sightedness of the Rock Island railroad officials, over the entire lines of that road in Kansas, reaching at least ten thousand farmers in that way.

THE SHORT COURSES.

Until a few years ago no special effort was made to reach young people who could not enter college for a full year and for the regular course. Now this institution is offering twelve-weeks' courses in farming, dairying, animal husbandry and in domestic science. Possibly a brief outline of work just ending will interest the farmers of Kansas, especially the young people. These courses are open to persons eighteen years of age and over. No maximum limit is made and men have been taking this course who are fifty years old—experienced farmers, men who come for this work and bring grown sons and daughters with them. The work is made intensely practical, not technical, largely made up of lectures and laboratory work. About one hundred and fifty men have been taking these courses, a fine body of earnest, sensible people who have done an enormous amount of work in a short time.

THE FARMERS' COURSE.

Naturally the largest group of students is found in this course which includes crop production, feeds and feeding, breeds of live stock, stock judging, and carpentry the first year, and farm management, diseases of farm animals, grain judging and farm blacksmithing the second year.

Crop production includes a discussion of the different soils, different crops, soil moisture, tillage, cultivation of crops, soil fertility, corn and wheat judging, methods of planting and seeding, etc. Farm management has included lectures on division of fields, rotation of crops, methods of restoring fertility, handling farm machinery, plows, cultivators, mowers, and all farm tools, laying out of farms, plans for farm buildings, farm accounts, drainage, etc.

Animal husbandry has had two courses, one on breeds of stock which has consisted of about fifty lectures on the various breeds of cattle, horses, hogs and sheep, with actual daily drill in the barns in judging the stock that day under discussion. These boys had the opportunity of attending a great Percheron horse sale held at the college barns. Another course of great interest taken by about 100 men was that of stock feeding. This consisted of a series of lectures on feeding beef cattle, hogs, sheep, and dairy cows, with opportunity to keep in touch with the experiments now being conducted here.

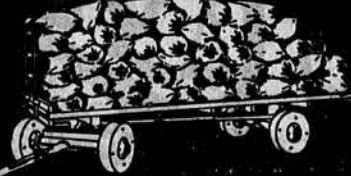
THE DAIRY COURSES.

These have attracted a great many young farmers who are already successful dairymen as well as many who simply want to make dairying a more important factor of farm business. The regular dairy course has had fifty-five students and their work has been exceedingly practical, handling separators, testing milk and cream, making butter and cheese and ice cream, with lectures on dairying, feed for dairy cows, diseases of dairy cows, etc. The college has a well-equipped

A BIG HAUL

Is easier on the team and on the man with a Farmers Handy Wagon than a half load with the ordinary high-wheel wagon. It rolls over the softest ground without cutting in. Loads in half the time with half the labor. You'll never know what a real handy wagon is until you've used the handiest wagon on earth.

THE FARMERS HANDY WAGON



The Farmers Handy Wagon is the invention of a farmer, and it meets all the conditions he aimed to fulfill. It saves time, saves labor, saves money every day on the farm. Sold by dealers. Write for catalog that describes and illustrates the many uses a Handy Wagon can be put to—it's an interesting book and it's free. The Farmers Handy Wagon Co. Saginaw, Mich.

Branches: Kansas City and Des Moines. Makers of the Handy Hay and Stock Rack and Handy All Steel Frame Wagon. Catalogs free.

MADE IN SAGINAW

creamery plant with the best of machinery for the making of butter and cheese, with 35 dairy cows, and this department now has fifty-two farmer customers who bring in separated cream. This gives the students the practical experience so very desirable, fitting them for handling a regular dairy, for making farm dairying more profitable, or for handling a creamery and making butter, or for taking charge of a cheese factory.

It is interesting to talk with these young men, to see them in recitation and to feel that this short course will be an inspiration for better farming, for better living, for a higher standard of citizenship. This winter the writer has met a great many farmer "short course" students and they are always alert and ready and it is very evident that their neighbors are watching them, realizing that they have learned something even in the "short course." A very remarkable thing, too, is that these one hundred and fifty young men came to the college in one day, dropped into the ways of the school at once, and have been treated just as well by everybody as if they had been university seniors. Verily the farmer's work is taking on a new dignity in these recent years.

Manhattan, Kans.

MILLER.

Table of Contents

Alcohol, Denaturated for farm purposes.....	340
Australian salt-bush.....	339
Alfalfa on sod.....	341
Beef-production, Western feeds for.....	343
Birds in regard to fruit and insects, remarks about.....	346
Business interests, concentration of, brings buyers.....	343
Chicken enemies, two.....	357
Concrete wall for cellar.....	337
Corn-growing contest, last word on the boys'.....	340
Cows, balanced rations for.....	353
Dry-weather crops in the West.....	339
Extricate man and watchdog.....	337
Farmers, educating young.....	333
Farm management.....	339
Farm notes.....	341
Feeding questions.....	342
Grange in Anderson Co. the.....	352
Grass, a new.....	337
Home orchard, the.....	354
Homes, how may we enhance the comforts and attractions of our.....	352
Husband's inheritance, the.....	337
Intelligent dog, an.....	349
International Sunday-school lesson.....	350
Long-distance concert, a.....	338
Manhattan grange.....	350
Manly, be.....	357
Mites and hawks.....	357
Moral victory, won a.....	351
Mothers' Day.....	350
Mud pies (poem).....	333
Observations.....	349
Parrot, a wonderful.....	342
Poland-China breeders, to.....	357
Poultry, thoroughbred.....	357
Price of the surplus is the price of the whole crop, the.....	341
Reciprocity—railroad questions.....	337
Right one, the.....	352
Spring Hill grange.....	349
Seed-corn, directions for testing the vitality of the.....	333
Seed-corn, select now.....	335
Shade trees for the home.....	342
Sows, caring for.....	356
Start, how shall I.....	339
Story, a "truly".....	339
Summer fallow vs. plant corn.....	347
Trade of the United States with Europe.....	348
Twenty years ago (poem).....	349
Two graces, the (poem).....	359
Veterinary department.....	351
West Side Study Club.....	351
Winter dairy, managing a.....	355

Agriculture

Summer-Fallow vs. Plant to Corn.

I have a nice level field consisting of 135 acres. This field has been in cultivation for twenty years, with the exception of about 15 acres of new ground two years old. This ground has had corn on it for the past two years and last year made about 15 bushels to the acre, with the exception of the new ground which made 33 bushels per acre. I thought I would plow this land in April or May and disk and harrow for wheat. The ground has a very heavy crop of stalks and crab-grass and I thought plowing this under would greatly benefit the soil. Which do you think would be advisable, to summer-fallow or plant to corn?

FRED HUMPHREY.

Barber County.

I would recommend summer-fallowing the old land in preference to cropping it with corn as a preparation for sowing this land to wheat in the fall. A fifteen-bushel crop of corn will hardly pay for the growing, and on soil which is deficient in fertility, as this appears to be, especially in your part of the State where the rainfall may not be over abundant, you can doubtless put the land into better condition for growing a good crop of wheat next season by summer-fallowing than by cropping during the present season.

In order to develop the fertility of the soil and conserve the soil-moisture, you should practice summer culture in summer-fallowing this land, that is, cultivate the field occasionally after plowing, in order to destroy weeds and keep the surface mulch of mellow soil. This land is doubtless somewhat exhausted of humus and is becoming deficient in fertility, and in order to give the land the most benefit I would recommend not to plow early this spring, but to disk the land and sow some early grain crop, as barley or oats, and plow this under for green manure some time in June before the grain has made too rank a growth. Cultivate occasionally during the balance of the summer as described above. This will not only conserve the soil-moisture and develop the fertility of the soil, but will hasten the decay of the green matter and produce a firm, well-settled seed-bed for fall seeding of wheat. Plowing under the stalks and crab-grass will add some humus to the soil, and in case you do not crop this season, it will be much preferable to plow under this material rather than to remove it or burn it on the ground. But doubtless you can prepare a seed-bed for barley or oats by disking and harrowing as I have described, and later plow under not only the stalks and crab-grass, but the green crop which has been produced; but do not let the growth get so rank and mature that it will not readily decay when plowed under. The object should be to get the soil well settled and firmed before sowing to wheat.

A. M. TENEYCK.

Dry-Weather Crops in the West.

Kindly tell us what kind of fodder or grass or green feed will be most likely to produce a sure crop in dry weather in the West. It gets dry in July and August.

WM. SILL.

Spokane, Wash.

I would advise you to write to your experiment station at Pullman, Washington, as doubtless the professor of agriculture at that station may be able to definitely name crops which are adapted for growing in your section of the country.

In this State we consider sorghum and Kafir-corn among our best fodder crops for the drier portions of the State. The common practice is to sow sorghum or Kafir-corn broadcast or in close drills, for forage production, harvesting the crop with the mower and putting it up for hay the same as grass except that the fodder must be allowed to cure in the field for a long period, the usual method being to leave the fodder in the field in large shocks during the winter, to be hauled and fed as needed. All through our Western country, alfalfa is one of the most valuable forage crops. It is one of the deepest rooting plants grown on the farm and is well adapted for resisting drouth and growing in a relatively dry climate.

Bromus inermis is a grass which we find adapted for growing in Central and Western Kansas. Kafir-corn and sorghum are also grown for seed- or grain-production, Kafir-corn being a very valuable grain crop, producing larger yields of grain per acre, where

it grows successfully, than may be secured from Indian corn.

Certain varieties of millet, as the hog or broom-corn type or variety, succeed well in Western Kansas. I should also recommend for trial in your part of the country cow-peas, a most excellent forage crop, and where the crop grows successfully, yields of two or three tons of good hay may be secured per acre. The hay is similar to alfalfa hay in feeding value. Cow-peas not only make a valuable crop for forage, but are excellent to use in rotation with other crops, acting as a soil-fertilizer, since the plant is a legume. By means of the bacteria which grow on the roots of the plants, the nitrogen-content in the crop is largely taken from the air and the supply of nitrogen in the soil may be actually increased by the growing of a crop of cow-peas.

A. M. TENEYCK.

Australian Salt-Bush.

Can you tell me anything about Australian salt-bush, a plant supposed to be something like alfalfa, and suited for dry climates? Also advise where the seed may be had, price per bushel, and amount of seed necessary to sow per acre.

SAM. M. DEAN.

Morton County.

The Australian salt-bush (*Atriplex semibaccata*), is not botanically related to alfalfa. It is, however, a forage plant which grows very successfully in alkali soils, producing abundantly where it is adapted for growing, making a fodder of high feeding value, and comparing favorably with alfalfa and clover in this respect.

We have not experimented with the crop to any extent at this station. It appears to be grown most successfully in California and some of the Rocky Mountain States. There are a number of varieties of salt-bush, which seem to vary in composition, production, and in their adaptation for growing under different climatic and soil conditions. You may secure seed of Australian salt-bush from the large seedsmen. The price is \$1.50 per pound, as published in their catalogues. One pound of seed is sufficient to plant an acre. The seed should be mixed with ten to twenty times its weight of ashes or ground grain so as to facilitate its distribution. It may be sown with the grain-drill, or better with the grass-seeder attachment to the grain-drill. The seed-bed should be carefully prepared and the seed should not be covered more than a half inch or so. Probably we should not sow too early in Kansas, but wait until the ground is warm taking care to prepare the seed-bed early, cultivating it at intervals in order to conserve the soil-moisture, and put the soil into good condition for germinating the seed. At this station we have usually failed to get the seed to germinate.

You may secure Farmers' Bulletin No. 108, on this subject, by writing to the United States Department of Agriculture, Washington, D. C. The California Experiment Station has also published a bulletin, No. 125 on Australian salt-bushes. A copy of this bulletin may be secured by writing to E. W. Hilgard, Director of the Experiment Station, Berkeley, California.

A. M. TENEYCK.

Farm Management.

Will you kindly advise me through the KANSAS FARMER how to manage my 80 acre farm? I have a good, average upland farm 6 1/2 miles from Ottawa. I have hardly made my expenses since I have owned the place. I have 5 acres in alfalfa, sowed last fall. I am going to sow 10 acres to oats, plant 36 acres to corn, and have 20 acres of prairie-hay meadow.

ANDREW BRADY.

Franklin County.

On a small farm, such as you describe, it is almost necessary to engage in some specialty in farming in order to make more than a bare living. As to what this specialty should be depends largely upon the farmer, as well as upon the soil and the location. In your section of the State and situated near so large a town as Ottawa, you could engage in the breeding of some kind of pure-bred live stock, such as hogs, sheep, or cattle, or you could make a specialty in some line or lines of crop-breeding; for instance, raise pure-bred seed-corn. There is a great demand today for better-bred seed-corn and better-bred seed of all kinds of crops.

If you want to learn how to succeed in special lines of farming, I advise you to come to Manhattan and take our short course in Agriculture which begins January 1 each winter, lasting twelve weeks. If you can not do this, determine on some special line of farming which you would like and secure all the information you can in the way of bulletins, books, and literature,

and make a study of the business before engaging in it. Meanwhile you can grow larger crops of corn, grain and alfalfa by thorough tillage of the soil, proper cultivation of the crop, and by the application of fertilizers especially barnyard manure, which you can doubtless secure from Ottawa during the winter season for the hauling. Six miles and a half is a long distance to haul manure, and yet, if you had nothing else to do, it might be well to haul manure during a part of the winter season when the roads are good. Eight or ten tons of good manure spread over an acre of your upland soil, if it is like the average upland soil of the State, would give an increase of 10 to 15 bushels per acre in the yield of corn for the first, second and third season after the manuring.

I have mailed a copy of my notes on crop rotation, which may give you some suggestions. Also, I am preparing a bulletin on "Farm Management" which will probably be published some time during the summer or early fall. You may secure the bulletins of this Experiment Station free by sending your name and address to Professor J. T. Willard, Director.

A. M. TENEYCK.

Directions for Testing the Vitality of Seed-Corn.

A. T. WIANCKO, AGRICULTURIST, PURDUE UNIVERSITY AGRICULTURAL EXPERIMENT STATION.

No farmer can afford to neglect making sure that every ear of corn he uses for seed will produce strong vigorous plants. The difference between none and two or three weak ears per bushel of seed-corn, may amount to hundreds of bushels in the resulting crop. The cost of producing an acre of corn is practically the same whether the stand of plants is good or poor, so why not have the good stand and the larger crop?

To make the germination test, proceed as follows:

1. Make a shallow tray or box about two feet by three feet in size and two inches deep inside. Bore small holes, one and three-quarter inches apart, in the sides and ends about half an inch from the top. Through these holes string light copper or galvanized wire both ways, thus marking the tray off into squares—a square for the kernels of each ear of corn to be tested. A stout string may be used instead of the wire but it will last only one season. Instead of weaving in the cross-wires, a piece of large-meshed, wire chicken fencing may be nailed on top of the tray, with a half-inch strip all around the edges on top of the wire so that when the tray is covered the cover will not rest on the wire. This is the "tester."

2. Fill the tester up to the wires with earth or sand and thoroughly wet it.

3. Take the tester to where your seed-corn is stored, or take both tester and the selected seed-corn to a place where you can work conveniently.

4. Take the first ear of corn and remove five kernels, each from a different part of the ear, and put them on the first square in the upper left-hand corner of the tester and press them down into the earth. Lay the ear on a shelf or table. Then take the next ear and proceed in the same way, putting the kernels in the square to the right of the first and the ear in the corresponding position beside the first ear on the shelf. Continue this until the first row of squares is filled, then turn and come back on the next row below. The ears corresponding to the second row of squares may be laid in a row on top of the first row on the shelf. Whatever the system followed, the ears must be so arranged that the ear belonging to the kernels in a certain square in the tester may be easily located.

5. After the kernels are all placed and well pressed into the wet soil, carry the tester into a room where the temperature can be kept around 70 degrees. The ordinary living-room will be about right, but the tester should not be put near the stove.

6. Cover the tester with panes of glass, resting lightly on the sides so as to let in a little air. Glass makes the best cover because it prevents drying out and at the same time permits one to see how the corn is getting along without lifting the cover.

7. After four or five days take off the cover, carry the tester to where the corn is stored and then examine the kernels in each square. If any lot of kernels shows dead germs or weak sprouts, throw away the ear from which they came. [Feed to the stock.] —Editor.] Never use an ear which does not show at least four strong roots and stem sprouts out of five kernels tested.

The tester may be made of any size

THE SIGN OF THE FISH



has stood for the BEST during seventy years of increasing sales.

Remember this when you want waterproof oiled coats, suits, hats, or horse goods for all kinds of wet work.

WE GUARANTEE EVERY GARMENT.

A. J. TOWER CO. BOSTON, MASS. U.S.A.
TOWER CANADIAN CO. LIMITED TORONTO, CAN.

Wire Fence 29c

48-in. stock fence per rod only
Best high carbon coiled steel spring wire
Catalog of fences, tools and supplies FREE
Buy direct at wholesale. Write today.
KANSAS FENCE CO. Box 92, Leavenworth, K.

FENCE

Strongest
Made. Built
strong. Holds
on tight. Sold to the Farmer at Wholesale
Price. Fully warranted. Catalog free
COILED SPRING FENCE CO.
Box 92, Leavenworth, Indiana.

LAWN FENCE

Made of Steel. Lasts a Lifetime. We have no equals. Sold to users at Wholesale Prices. 7 Cts. a foot up. Cheaper than wood. Catalogue Free. KITHAMEN BROTHERS, Box 399, Kansas, Indiana.

"The Best of Prophets"

of the future is the past. The first Page Fence built have been in use 20 years and are still good fences. We make better fences now than ever before. Use stronger wire, heavier cross-bars, thicker galvanizing. Write. PAGE WOVEN WIRE FENCE CO. Box 7888, Adrian, Mich.

IWANS' POST HOLE AND WELL AUGER

Best earth auger in the world. For Fence and Telephone Post Holes, Wells, etc. Complicated with the work so—
IWANS' Auger than with any other. Makes hole smoothly and quickly; supplies easily; is very durable. Used by U. S. Govt. A. 4, 4, 4, 7, 8, 9 and 10 inch, \$2.50 each; 12 inch, \$3.00; 14 inch, \$3.50. Sample at special price to introduce. Agents Wanted. Inquire of dealers or write direct for particulars. IWANS BROS., Dept. H, Streator, ILL.

\$10.00 Grass Feed \$14.00 Galvanized

We manufacture all sizes and styles. It will pay you to inquire. Write for price list.

CURRIE WIND MILL
Topeka, Kansas.

CEMENT FENCE POST or Building Blocks

WITH THE
CROUCH \$10 MACHINE

Any Farm Hand can use it. Will not rust or burn. Cheaper than wood, and will last for ages. Circulars Free.

Ellsworth Crouch, Oakland, Kansas

I have run 56 bales in 60 minutes weighing 70 pounds. J. M. Foster, Silver Lake, Kans. The parties running the two presses at Vera, I. T., say that two men can accomplish more with your press than three can with any other.



Satisfaction guaranteed. Manufactured by the AUTO FEEDER
HAY PRESS CO., 1064 Jefferson St., Topeka, Kansas

EUREKA BOILER

or STEAM FEED COOKER

Saves half your corn or other feed. Saves labor in feeding. It will steam moldy hay or corn perfectly sweet. Makes corn stalks or straw perfectly palatable. Write for information.

John Deere Plow Co.
Denver Kansas City, Mo.

Modern Silage Methods

That is the title of our new 118 page book. It tells everything anybody could possibly want to know about the silage subject. You can't think of a question that it does not fully answer. How to build, from foundation up, all kinds of silos. All about the crops and how to cut and fill. How to feed, with the most complete feeding tables ever published. About 40 illustrations help to make things plain. Used as a text book in many Agricultural Colleges. We have always sold the book for 10 cents, but for a limited time, to any reader who will ask for it, and name this paper, we will send a copy free. Write at once.

SILVER MFG. CO.,
Salem, Ohio.

\$16.00 AN ACRE in Western Canada



is the amount many farmers will realize from their wheat crop this year.

25 Bushels to the Acre will be the Average Yield of Wheat

The land that this was grown on cost many of the farmers absolutely nothing, while those who wish to add to the 150 acres the Government grants, can buy land adjoining at from \$6 to \$10 an acre.

Climate splendid, schools and churches convenient, railways close at hand, taxes low.

Send for pamphlet "20th Century Canada" and full particulars regarding rate, etc., to Superintendent of Immigration, Ottawa, Can.; or to the following authorized Canadian Government Agent

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.
Mention this paper.

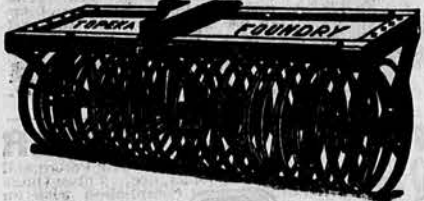
**ALL STYLES
LOWEST PRICES**

SCALES

30 DAYS
FREE TRIAL

AMERICAN SCALE CO.
304 FIDELITY TRUST BLDG., KANSAS CITY, MO.

DROUTH DEFIER



NEVER LOSE A CROP
If you use the Topeka Foundry Packer, Packs surface as well as subsurface. Write for prices and circulars.

Topeka Foundry

TOPEKA, KANSAS
When writing mention Kansas Farmer.

A Buggy Bargain



**Buy It on a Plan so You
Know You Have a Bargain**
WE PAY THE FREIGHT.

You deal with the factory. 30 Days Trial. You can test its quality for yourself and see that its price is about half the local dealers' price.

GUARANTEED TWO YEARS

We insure you against any loss if a flaw develops in either workmanship or material within that time. Do you want a vehicle of that kind sold that way? Anything you need in vehicle line on just that plan. Send today for manufacturers' catalog. Address Dept. D
The Apex Mfg. Co., Bloomington, Ill.

Before you buy that Manure Spreader

see that it has sills and frame made of oak, a ball and socket joint on front axle to prevent racking and twisting, and steel braces and steel truss rods to guard against warping and sagging. See that the apron does not run backward and forward on hilly ground, but insist on a continuous positive apron drive



See that it is practically automatic, and so simple that any boy who can drive a team can run it as well as any man, and control every operation without leaving the seat. The

Appleton Manure Spreader

has all these important features and many others equally as important. Write to-day for free catalogue and special prices and terms.
APPLETON MANUFACTURING CO.
19 Fargo Street, Batavia, Ill., U. S. A.

convenient. The one described above will test about three bushels of ear-corn at a time, or every five days.

Denaturalized Alcohol for Farm Purposes.

The object of this article is not to augment the consumption of alcohol as a beverage, but to find channels other than a digestive one, for its employment. Alcohol in its abuses constitutes a danger of mankind, but it has been proved that it can rival gas, acetylene and electricity for lighting and domestic uses. That which causes disorder of the stomach of man, agrees perfectly well with the internal organism of stoves, lamps and motors. Ethyl alcohol, which forms the basis of all fermented liquors, is the oldest and best-known of the whole group of alcohols, and is generally designated by the simple name, alcohol. It may be produced in various ways. Science enables us to employ an inexhaustible series of products of the soil, and has created a new source of riches for the agriculturist. MATERIALS FROM WHICH ALCOHOL IS MADE.

The materials used in the production of alcohol are of two classes—those containing starch and those containing sugar. In the first class are included potatoes, corn, rice, barley, oats, rye, and wheat. In the second class are sugar-beets and molasses from sugar-beets and cane sugar. The potato has been used for the manufacture of alcohol since the eighteenth century, and in many parts of Europe it constitutes the most important raw material for its production. Experiments to produce vigorous potatoes from seed and secure a high percentage of starch, which is of the greatest importance for the manufacture of alcohol, have met with very good success. Diseased potatoes, except when attacked by dry rot, can be advantageously utilized for the manufacture of alcohol because the chemical changes produced by the disease extend more to the skin and less to the starch.

Corn is extensively used for distilling purposes in the United States, Hungary, and Italy. It contains 60 to 75 per cent of starch, and in addition about 11.5 per cent of sugar, and 4.8 per cent dextrin. By breeding and selection, the amount of starch in corn can be largely increased, thus making it an ideal cereal for the manufacture of alcohol for industrial purposes.

Barley, rye, oats, wheat, and rice contain from 42 to 78 per cent of starch, which, when the price will permit their use, are valuable materials for the manufacture of alcohol.

In the manufacture of alcohol from sugar-beets, the yield depends solely on the percentage of sugar. The selection of the best beets for distilling purposes is not of importance, and beets which can not be advantageously worked for sugar may be practicably utilized for alcohol.

Molasses, which remains as a residue in the manufacture of sugar, is utilized for the manufacture of alcohol. The percentage of sugar in molasses is about 50 per cent.

Of the raw materials containing sugar, which can be utilized in the manufacture of alcohol, are Jerusalem artichoke, the gigantic carrot, chicory, sorghum-stalks and corn-stalks.

HOW ALCOHOL IS DENATURIZED.

The denaturalization of alcohol is accomplished by mixing with the alcohol a small proportion of repugnant ingredients, which, while not injuring its efficiency for technical uses, render it unfit for consumption as a beverage. The denaturalizing substances employed depend upon the use to which the alcohol is to be subsequently applied. They include pyradin, picolin, benzene, wood vinegar, wood alcohol, gasoline, and acetone oil (derived from the grease of the wool of sheep), as well as other similar products.

ALCOHOL IN GERMANY.

For several reasons the subject of the technical use of alcohol has reached in Germany an advanced stage of development, which if followed by the United States will mean a great change in our agricultural and industrial development. Germany has no natural gas wells nor native petroleum supply. When some years ago the question of adopting motor carriages for military purposes was under discussion, it was remarked by the officials of the War Department that kerosene and gasoline engines could be operated only with one or the other of the products of petroleum, which is not found in Germany and the supply of which may in case of war be wholly cut off. But the broad, sandy plains of Northern and Central Germany produce in ordinary years cheap and abundant crops of potatoes, from which is easily manufactured by

processes so simple as to be within the reach of every farmer, a vast quantity of raw alcohol. Under these conditions "spiritus," as it is known in Germany, became one of the standard and important products of agriculture, and every effort has been made by the imperial and state governments to promote and extend its use for domestic and industrial purposes. A law was passed in Germany which maintains a very high tax on alcohol intended for drinking, but exempts from taxation such alcohols as are denaturalized and used for industrial purposes. Since the passage of the above law, inventors and scientists have been busy in the improvement of processes and the manufacture of stilleries. Now perfected motors, lamps, and cooking and heating apparatus have been devised and put in use, until crude alcohol is becoming one of the most widely utilized products of German industry.

ALCOHOL FOR LIGHTS AND POWER.

For lighting purposes, as alcohol gives a non-luminous flame, a chemical mantle is used similar to the Welsbach burner, which produces a very bright, intense and economical light, costing but one cent per burner, per hour, for 71 candle power. For the production of heat generally it is simply perfection, and nothing has yet been found to equal ethyl alcohol for this purpose, owing to the fact that it produces perfect and complete combustion.

Alcohol made repugnant to the taste is being used as an incandescent light. Instead of being drunk, it is burned. It propels the farm motor, the automobile and launch, and the simple fact of obtaining denaturalization permits each private citizen to light his farm or factory, to heat his home, do farmwork, or transport himself. One of the neatest of the many new devices used in Germany is an alcohol flatiron with a small reservoir, which being filled with alcohol and lit, heats the iron for the hour's work, at a cost of less than two cents. The cleanliness and economy of these figures to the housekeeper, are obvious. For farm motors alcohol is a perfect fuel because of its complete combustion, the absence of its noxious odors, its uniform quality and its unlimited and universal sources. While it is true that the heat of combustion of alcohol is practically only half that of gasoline, yet twice as large a percentage of heat can be converted into useful work as in gasoline, and hence point for point, alcohol is as efficient as gasoline.

ALCOHOL ENGINES.

Only slight modifications of gasoline engines adapt them to the use of alcohol—a fact which is of much importance, since an engine to be efficient and practical for general use must not be too highly specialized. Because of the great elasticity of the charge after ignition, the stroke on an alcohol engine to be most efficient ought to be about double the bore of the cylinder. A high compression and comparatively cool mixture should be attained, and a good spark, complete vaporization and a complete mixture of the charge secured. Alcohol of 90 per cent strength, with 10 per cent of water is usually employed. Wherever small engines can be used and a power safe in every respect is of value, the alcohol motor can be advantageously employed. Its spread during the few years of its existence in Europe, has attained quite unexpected proportions, and will doubtless continue. Since 1896 the law in Belgium has exempted from taxation alcohol for industrial uses. Since that time this has also been done in France, Austria, Hungary, Belgium, Italy and Russia.

ALCOHOL BEFORE THE GREAT WAR.

Special documents show that in the United States alcohol was used for lighting, cooking and industrial purposes in the early sixties. Before the war of secession, the manufacture of spirits was free from all special taxes and supervision, as much on the part of the Union as on the part of the States which composed it. It resulted from this freedom that alcohol served a multitude of industrial uses. The production was enormous, amounting to 90,000,000 gallons, coming especially from the distillation of corn. For lighting purposes enormous quantities were employed. In 1864 the city of Cincinnati alone utilized 12,000 bushels of corn per day for distillation. Because of its low price, alcohol was also used as fuel for the domestic kitchen, for bath and laundry. Denaturalized alcohol has been produced in Germany chiefly from potatoes, and sold for 13 cents per gallon. It is stated in the March number of Power, 1901, that a New York distiller produced alcohol at a cost of 8 cents per gallon. It was sold in New York in carload lots at \$2.26. The tax is \$2.08 per gallon, which would leave 18 cents

to cover cost of production, profit, and risk of tax. Distillers claim that from 40 cent corn, alcohol can be manufactured for 13½ cents per gallon of 94 per cent strength. In Cuba, Peru, Brazil and other sugar-producing countries, alcohol is manufactured from the waste products, and hence very cheaply produced. The present price in Cuba is about 10 cents per gallon. It is thus seen that alcohol can successfully compete in price with gasoline, which now sells for from 12 to 22 cents per gallon. There is an urgent need in this country for free alcohol in the field of heat, power, and light.

GASOLINE ENGINES.

Within the past five years there has been a remarkable increase in the output of gasoline engines, and more particularly among the smaller sizes. When the fuel requirements of the engines of a rapidly growing automobile industry, in addition to an annual output of over 100,000 gasoline engines, is contemplated, it becomes a question of the most vital importance. The average percentage of gasoline in petroleum from all the oil-fields of the world is less than 2 per cent, and this fact taken in connection with the constantly increasing demands, accounts for the great increase in the price of gasoline within the past few years. The supply must eventually be exhausted. In view of these facts it seems apparent that through false economy the people may be deprived of a natural resource. The use of alcohol for fuel-purposes would benefit the farm by producing a market for a great many starchy materials unfit for, or unnecessary to consumption, and at the same time reduce the cost of motive power for farmwork.

The fact that all foreign countries have laws providing for free industrial alcohol and that alcohol is being successfully employed by these countries for such purposes to the great injury of our own trade, is striking evidence of the wisdom and practicability of removing the tax on alcohol in this country. A law for this purpose will bring prosperity to the greatest body of our best and truest citizens, the American farmers, who will derive from their farm products of corn, wheat, potatoes, and waste products, denaturalized alcohol, by which they will be able to light and heat their homes, cook their food and drive their engines; which will furnish power for the farm implements, pump water for the cattle and for irrigation, as well as numerous kinds of other farm labor. Favorable action on a subject of such vast importance and one in which the need for action is becoming so acute, should not be long delayed by a government "committed to the protection of home industries." Every one who uses one or more of the thousand articles requiring alcohol in their manufacture; every one who is obliged to accept cheap and noxious substitutes which may be foisted upon him instead of alcohol, for legitimate purposes, and every one interested in the price of corn and other farm products of which alcohol may be manufactured, has a grievance against the present system of taxation now in force.—C. J. Zintheo, U. S. Department of Agriculture, in The Gas Engine, January, 1906.

Last Word on the Boys' Corn-Growing Contest.

EDITOR KANSAS FARMER:—The Boys' Corn-Growing Contest, started by the Kansas State Agricultural College, promises to go way beyond the expectation of the Institute Committee. It certainly has struck a popular chord and has appealed to farmers and business men as a worthy movement. It was the intention of the college committee to leave large latitude for the county committees in the matter of seed-corn and prizes. For the most part, corn is being selected from nearby farms, although many are sending to distant parts of Kansas, and some to Iowa and Illinois.

All local committees should now set a date when entries must close, and a date and place or places for distribution of seed-corn. By May 1, 1906, I want to receive from each local or county contest committee the following data: (1) Number of boys enrolled in the contest. (2) Variety or varieties of corn furnished to the boys, and cost of same, if purchased. (3) Amount of premiums offered and whether in cash or merchandise. (4) Entire premium list, including those for quantity as well as for best ten ears. (5) A printed list of names of contestants with post-office addresses. This may be cut from county or local papers publishing same.

The work should be pushed vigorously now in these next few weeks. It is hoped that every county in Eastern

Kansas will have not less than 200 contestants, and many counties will have 500 enrolled. This is a movement worthy of the time and thought and labor of the busiest men of any community.

Many counties have offered additional premiums for the greatest yield obtained from one quart of corn. Many of the committees have also made the contest open to girls.

The Institute Department will gladly co-operate in any further way for the success of the movement.

J. H. MILLER,
Farmers' Institute Secretary.

Alfalfa on Sod.

Editor Kansas Farmer: I would like to inquire through the columns of your valuable paper if there is any one raising Iowa Silver Mine corn west of the Fort Hays station, that has a few bushels of seed to spare? If so, would like to have him write me at Banner, Kans.

I wish to say in answer to E. L. Kellogg's inquiry in the issue of March 8, as to sowing alfalfa on sod, that I have had very good luck in seeding alfalfa on freshly-broken sod, if broken deep and well pulverized with a disc, especially so on sandy land. I consider the time when the sod is first broken up the best for sowing alfalfa on sandy soil. I prefer broadcasting to drilling, and I harrow the seed in by using a slanting tooth harrow. I consider 10 pounds No. 1 seed sufficient for a good stand.

F. P. MANZER.

Trego County.

Farm Notes.

Care and fertilizers make the farm; care and feed make the stock.

A little turpentine in their feed speedily relieves animals troubled with worms.

By using the drill for sowing, the depth of covering is uniform and there is no loss of seed.

The effect of overfeeding is very disastrous in most cases and especially so when the stock is quite young.

The productiveness or unproductiveness of the farm depends chiefly on the farmer and his methods.

About one-half of the time when stock is fed for a certain market, it is sold at a disadvantage.

The richness of the food given to stock has much to do with the value of the manure made from it.

No farmer makes a mistake when he determines to make his manure pile as large as possible so that every source of fertility shall be utilized.

The best way to make the hay crop profitable is to feed it on the farm and return the manure to the soil.

Thorough cultivation is essential to good crops, but thorough preparation of the ground before planting is just as essential.

Clay ground should never be plowed when wet, but very gravelly or sandy soil may sometimes be plowed wet without much damage.

In nearly all cases, the wisest course is to convert the grain into meat before shipping it to market and thus keep up the fertility of the farm.

Comfort is a prime condition of animal growth and this can be secured only by comfortable surroundings, such as warm, dry stables and sheds.

In using kerosene in killing lice on stock, mix it with lard about half and half, or it may take all of the hair off, if it does not otherwise injure the stock.

As the season comes in for active operations on the farm, do not, in the rush of work, forget the improvement of the stock. Keep better breeding animals the coming year than ever before. Buy blooded males of the best strains and grade the herds and flocks up to a high standard as soon as possible.

N. J. SHEPHERD.

Eldon, Mo.

The Price of the Surplus is the Price of the Whole Crop.

What to do with our surplus products is a problem of vital interest to the farmer. The manufacturer complains bitterly of what he calls his "surplus," but the manufacturer does not have to operate his plant at full capacity unless the trade will take his output. Nine-tenths of the manufactures of the country work only on orders or contracts, and shut down or reduce their working force whenever they can not obtain orders. Very few manufacturers make up goods and then wait for customers to come.

The farmer, however, does not produce his crops "to order." When he sows his wheat he has no means of knowing whether the crop will bring 50 cents or \$1.50 per bushel. He must trust to the market for the price, and to nature for the crop. The same un-

certainly prevails in live stock and every other product of the farm. When his products are ready he ships them to market and takes his chances. He can not, like the manufacturer, close his plant or reduce his force. He must go on, year after year, raising all that he can and trusting to the market.

In nine years out of ten American markets for farm products are made by the volume of the surplus which must be exported; and the Western farmer must trust to the demand of foreign countries for his price, in normal years about 30 per cent of our wheat and our commercial productions of meat must be shipped out of the

country. More than 60 per cent of our cotton and about half our tobacco goes abroad, and directly or indirectly, about a quarter of our corn crop is surplus.

Twenty-five years ago our surplus of live stock and provisions had grown to \$175,000,000. In the next two years, when the markets of Continental Europe were closed to our cattle and our pork, our exports declined about \$50,000,000, and the great pressure of the surplus on our markets caused a ruinous fall in the values of live stock in this country. American houses searched the world over for other markets, and our exports gradually recovered, and in 1890 the German market was reopened

to our pork. The exports of the live stock industry, by 1900, had grown to about \$250,000,000. In the past three years, however, Germany has gradually closed her ports by new inspection laws, and her influence has been exerted in other countries to shut us out, and our foreign trade in meats has been declining. The surplus is left in our markets and is helping to cause depression in prices.

Hence the importance of the reciprocity movement now in progress. Every farmer in the country should ask his Congressman and Senators to help open the Continental European markets to our grain and meats.

Now IS THE TIME! GET A GOOD READY FOR HARVEST

You have heard of the cow that gives a big pail of milk and then at the last moment kicks over the bucket and spoils it all?
What about the man who grows a good crop of grain and then half harvests it?

You wouldn't waste half your crop.

Of course not.

But why waste any of it?

Why not get it all?

As the boys say, "Every little bit helps."

Every little bit wasted, counts—and counts against you and your profits.

As a sensible farmer, you can't afford to approach harvest time without making sure that you are ready for it the very minute that your grain is ready.

You cannot afford to depend upon a harvesting machine that wastes even a small part of your grain.

You cannot afford to spend your money for a "may-be-so" harvesting machine—one that may or may not do your work for you in a satisfactory manner.

You cannot afford to start harvesting with a machine that may break down at your busiest moment.

You cannot afford to start harvesting with a machine that will half kill your horses before your grain is cut.

You cannot afford to start harvesting with a machine that is likely to cause delay in your work.

You cannot afford to take chances.

You want to be sure, and now is the time to make sure.

Go to the Nearest Dealer

Examine for yourself the line of standard harvesting and haying machines for 1906. Get a catalogue and study their construction. You will find in

Champion, Deering, McCormick,
Milwaukee, Osborne, Plano

lines harvesting and haying machines that meet your every expectation and fill your every requirement.

They are right in principle and design, for they are the product of a half century's inventive genius. Every improvement that the best mechanical experts of the world have been able to discover or devise in 50 years is embodied in their construction. That's why they are so convenient to handle—why they do their work so well. That explains too why they are so easy on man and horse—and why they waste so little grain.

They are right in materials, for their manufacturers by co-operation are able to produce and select the best materials. By co-operation they are able to own, control and operate their own lumber camps, their own iron mines, their own coal mines, their own coke furnaces, their own steel mills and other sources of raw materials, thus being sure at all times to have materials for making their machines of the highest quality.

They are right in workmanship, because the demand for these standard machines is so great that immense factories are necessary for their production, and their manufacturers are able to equip the factories with the best facilities and the most expert workmen.

They are right in reputation, for they have by their own merit survived years of strenuous competition. They gained their popularity solely on their merits. They retain their popularity in the same way. They are used all over the world solely because they have met the demands and filled the requirements of grain-growers and grass-growers.

Is not that just the machine you need for your harvest for 1906? You certainly want a machine with a reputation behind it—you cannot afford to run risks. Where can you find a machine of any kind that has a record of more years of successful, satisfactory work than you know these machines to have?

You want a harvesting or a haying machine made of the right materials. No machine can have better materials than have these machines—few manufacturers are fortunate enough to secure so good.

You want a machine that is built on the right plan—that "works right"—that is constructed on the right principle. The approval of the grain growers of the whole world—the successful standing of the test of years—the ever increasing popularity of these machines—these things tell the story of how they are built and how they work.

In reputation, in workmanship, in materials, in design—in all that goes to make good harvesting and haying machines they are right. They will meet your every requirement.

Can you afford then to go into the harvest with a machine that may fail you?

Can you afford to run the risk of a "break down" at a critical stage of your harvesting?

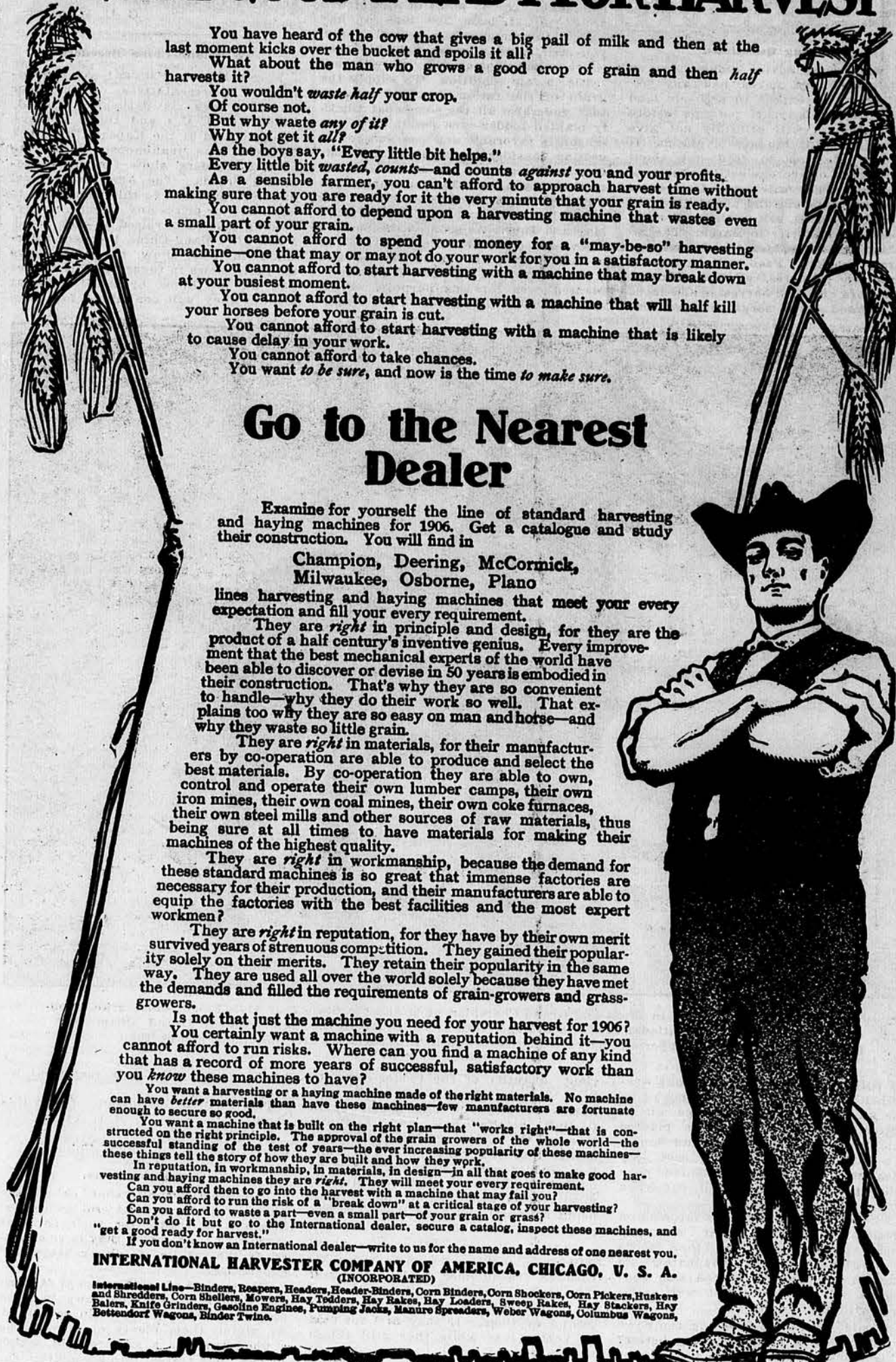
Can you afford to waste a part—even a small part—of your grain or grass?

Don't do it but go to the International dealer, secure a catalog, inspect these machines, and get a good ready for harvest.

If you don't know an International dealer—write to us for the name and address of one nearest you.

INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U. S. A.

(INCORPORATED)
International Line—Binders, Reapers, Headers, Header-Binders, Corn Binders, Corn Shocks, Corn Pickers, Huskers and Shredders, Corn Shellers, Mowers, Hay Tedders, Hay Rakes, Hay Loaders, Sweep Rakes, Hay Stackers, Hay Bales, Knife Grinders, Gasoline Engines, Pumping Jacks, Manure Spreaders, Weber Wagons, Columbus Wagons, Bettendorf Wagons, Binder Twine.



Stock Interests

PURE-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

April 3, 1906—James Stock Farm, Willard, Kans., trotting-bred horses.

April 13, 1906—Shorthorns by the Southeastern Breeders Association at Fredonia, Kans. H. E. Bachelder, Manager.

April 23, 1906—Shorthorns at Manhattan, Kans. F. M. Gifford, Wakefield, Kans.

May 1, 1906—George Allen, Omaha, Neb., Shorthorns.

May 8, 9, 10, 1906—Great sale of all beef breeds of cattle at Wichita Kans. D. R. Mills, Des Moines, Iowa, Manager.

Feeding Questions.

I wish some advice along lines on which we have never had any experience. We expect to sell our land some time this year, perhaps before fall, although will probably not give possession until January or March. It is our intention to feed out about eighty head of average cattle, nearly all she stuff. They will range from three to seven years old and about fifty will soon have calves, say in the next eight weeks, the majority in March. The intention is to feed for the January or March market. Feed will be alfalfa, raised on 45 acres, all the cuttings, Kafir-corn cut with harvester and cared for in good shape, sorghum broadcast-

at this long range, I do not know whether I can be of much service in helping you to solve the problem.

I understand that it is your intention to dispose of all cattle on the place, not later than March, 1907. From the fact that all ages and undoubtedly various types of cattle will be included, it will be impossible to put this bunch of cattle on the market much above the butcher class of cattle. It probably would not be good policy to try to make too great use of expensive grain to finish them. You will undoubtedly be able to raise an abundance of good roughage. The 45 acres of alfalfa will yield you at least 200 tons of hay and, if this amount can be well cured, you will have a most valuable feed ready in sufficient quantity to put these cattle in fair condition. To supply the grain of the ration, I would suggest that you raise all the somewhat thickly planted fodder-corn possible. If the season is favorable and you succeed in getting considerable grain in this fodder, it will greatly aid in putting the cattle in good condition for market. If the pasture is good, the cattle will probably thrive and gain well during May and June. As soon as the pasture shows any signs of failing, the feeding of fodder-corn should be started and it would be well to have some early-planted corn for this purpose. From this on, the cattle should be fed a suffi-

three or four months before they are to be sold. You should, of course, run some hogs after these cattle to save the corn and this bunch of shoats, which you have on hand, will be in good shape for this purpose and you can carry them through the summer on pasture, alfalfa if possible, with very little grain. They will have size and frame and will not have cost very much and will be in good condition to utilize the undigested grain dropped by the cattle. You may find it necessary to feed a little corn extra to the hogs in order to get them ready for the market when the cattle go.

G. C. WHEELER.

To Poland-China Breeders.

EDITOR KANSAS FARMER:—At a meeting of representatives of the four breeds of hogs, viz; Berkshires, Poland-Chinas, O. I. C's and Duroc Jerseys, recently held at the Kansas City Stock Yards, it was unanimously decided to hold a breeders' show for the above-named breeds. The American Royal directors proposed to this committee to duplicate for prizes any amount, not exceeding \$150 each, raised by each breed. I ask all Poland-China breeders interested in this show to please give me their views in regard to this matter and let me know by April 1, what amount they will contribute for these

Kendall's Spavin Cure

What horseman does not know the standard cure? Infallible when taken in time for Ringbone, Curb, Splint, Spavin. Never two opinions as to its powers.

Bone Spavin Entirely Cured.

Kenton, Ohio, Feb. 20, 1906.

Dr. B. J. Kendall Co.,

Enosburg Falls, Vt.

Gentlemen—I had a fine horse which I priced at \$300.00, which got a Bone Spavin almost half the size of a hen's egg; I used two bottles of your liniment and entirely removed the Spavin and now no one can tell one limb from another.

Yours truly,
Lawrence Althausen.

Price \$1; 6 for \$5.

Greatest known liniment for family use. All druggists. Accept no substitute. "Treatise on the Horse" free from druggists or

Dr. B. J. Kendall Co., Enosburg Falls, Vt.

Dipolene

For All Farm Stock

Every farmer should dip his stock in DIP-OLENE—promotes health,

Prevents Disease

It kills sheep ticks, lice on hogs, horses and cattle, fleas on dogs. Cures scab, eczema, mange and all skin diseases on domestic animals; lice on chickens. DIP-OLENE DOES IT IN A MINUTE without injury. One gallon makes 100 gallons of dip ready for use. Write today for price and FREE booklet, "DIPPING FOR DOLLARS—learn how easy it is to dip."

MARSHALL OIL CO.,
BOX 13,
MARSHALLTOWN, IA.

KRESO DIP KILLS LICE

ON ALL LIVE STOCK
EASY & SAFE TO USE



KRESO DIP
KILLS THIS
AND ALL OTHERS

RED CATTLE LICE,
HORSE LICE, HOG LICE,
SHEEP LICE & TICKS,
POULTRY LICE,
DOG LICE
AND
FLEAS

Write For Free Booklets
For Sale By All Druggists

PARKE, DAVIS & CO.

Home Offices and Laboratories:

Branches: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U.S.A., Walkerville, Ont., Montreal, Que.

PINK EYE CURE FOR HORSES AND CATTLE

Sure relief for Pink Eye, foreign irritating substances, clears the eyes of Horses and Cattle when quite milky. Sent prepaid for the price, \$1.

Address orders to W. O. THURSTON,
Himdale, Kansas.



Roseberg 40447 (55713), First in Class and Grand Champion at Minnesota State Fair 1905, Lewis and Clarke Exposition 1905 and the International Live Stock Exposition 1905. Defeated the International Grand Champions of 1903 and 1904. Imported and owned by McLaughlin Bros., Kansas City Columbus and St. Paul.

ed with some Kafir mixed, about one-fifth Kafir. This mixing does not make the stock so lose and is eaten with a better relish too. Corn was planted thickly in June for fodder and bound. We want to use little, if any, corn. My idea was to feed late-planted corn when pasture begins to fall, but when stover gets dry then what?

I know a bunch of steers fattened on alfalfa, exclusively, that averaged 1000½ pounds each. No other feeds were given them. Unfortunately, no one knows how much feed was consumed but the owner was well satisfied with the results.

Would you advise breeding the cows with a view of their fattening better? This I should like to have you answer fully for people differ so on this subject. We have never had any experience so these questions which may seem very simple to you are perplexing to us.

We have used a Duroc boar on well-bred Poland-China sows. Nine sows now have 53 pigs, seven being first litters. These were September and October pigs. They are weaned now, of course, and not a runt among them. Every person who sees them comments freely on them. The result of crossing is very satisfactory indeed. Will breed no further of course. S. I. WILKIN.

Rooks County.

The proposition which you have before you is a somewhat difficult one and,

cient quantity of the fodder-corn to keep them gaining. As soon as the corn begins to dry, you had better begin feeding alfalfa hay and continue through the winter giving them what alfalfa they will consume and in addition, fodder corn. Kafir-corn may be used but the grain will not give as good results when fed in this way, it being so small and hard that it is not properly masticated.

As to the disposal of the calves which will undoubtedly run with the cows through the summer, I would suggest that if the prices for veal remain good that might be the best method of disposing of them. If they are not sold as veal calves while they still retain the calf-fat, it will be necessary to carry them through the winter as stockers, feeding plenty of alfalfa and some grain. You could hardly hope to mature and finish them as baby beef by March, so that they would have to be sold as stockers if carried through until that time. They should not be allowed to suffer hardship through the winter and should be kept gaining at least a pound to a pound and a half daily. Experiments have shown that it does not pay to keep calves through the first winter upon a ration of hay alone, although if first-quality alfalfa hay be used, this statement might not hold good.

Cows in the fattening-pen will be quieter and feed better if they are bred

prizes, so we will know just what we can do.

There will be no entrance fee to this show. E. E. AXLINE.

Oak Grove, Mo.
Committeeman for Poland-Chinas.

Caring for Sows.

The American Swineherd gives the plans of two practical and successful breeders in caring for their sows at farrowing time, which they have adopted as the results of twenty-five years' experience:

"My method of saving pigs at farrowing time is to get the sows in good condition before they begin to farrow by giving them plenty of exercise by a good range in a pasture field, which brings their system into a condition for easy farrowing. It prevents them from becoming restless in getting up and down while farrowing, which is one of the reasons for sick pigs. About two days before she is due to farrow I put her in a lot by herself, make her a nice bed and am around her a great deal to get her tame and accustomed to me so she will not be afraid. Then scratch her and have her lie down, and she will become quiet and very docile at farrowing time. No matter how the sow acts, never strike or kick her at this time. She never forgets it. She appreciates good treatment at this time. Take her pigs as fast as they come and put them in a basket. In cold weather

set them behind a stove until she is through farrowing. Then with a pair of little pinchers take off the little tusks so that they will not bite their mother or each other. You will find upon examination that the little pigs have eight long teeth, four below and four above the mouth. Now, if you break these teeth off when they first arrive or are not over a day old, there will be no sore noses or mouths, as you oftentimes see them. Nor will your sow be jumping up every little while. It is these eight sharp teeth that cause the trouble and the loss of many a good pig. She jumps up when they bite her and drops down as quick and catches one or more of the pigs under her. Experience has taught me to prevent this by disposing of these little tusks. If they are not snapped off they not only endanger their lives by the sows lying on them, but become embroiled in bitter fights which leave them with sore mouths that become fatal if not looked after. Too much importance can not be given this little transaction of detusking the little pigs at birth.

"A breeder should stay with his sows himself in the time of farrowing if he desires to save the pigs. It is difficult to hire any one who will take as much interest as yourself. If you get the pigs one week old you are safe with them, or at least I am.

"This is my method of saving pigs and I generally can save as many as the sows can take care of.

"Our pigs will begin to come the forepart of February, and if any of the boys want to see me at that time they will have to come to my hog house, as I am on deck at that point."

The second plan is:

"The sow is let go at will until she is due and when she shows signs of maternity or making her bed, she is quietly placed in a pen by herself. The person who knows the day of service can tell almost exactly what time she will farrow. Farrowing 112 to 115 days from the date of being bred.

"The owner should make it a point to be with the sow at the time of farrowing and see that the pigs get started right. They usually farrow at night and a person should not be above his business and should be on hand looking after these things. This is when a person will be well paid regardless of time of night to watch carefully the farrowing sow. If she shows no indication of being restless, she should be let alone at least twenty-four hours. Then for the first few days after farrowing she is fed lightly but gradually carried up to full feed as the pigs grow older. Care must be taken and not carry the pigs along too fast. A fat, overdone pig when young is a ruined pig for future development."

Concentration of Business Interests Brings Buyers.

EDITOR KANSAS FARMER:—A Kansas man never loses interest in his own State no matter where he may be located. During the last few months that I have been away from Kansas, I have observed a number of the things that the progressive farmers and stock-breeders of Wisconsin are doing, and invariably and almost unconsciously, my mind compares the methods employed with those that exist in Kansas. One of the things that is being agitated and pushed at the present time is the concentration of agricultural interests in a given community. For instance, the Holstein-Friesian interests are being pushed at Lake Mills where a number of breeders are producing this class of cattle. A buyer looking for Holstein cattle invariably goes to Lake Mills because he has a greater opportunity for selection, and, if he is a heavy buyer, can probably get what he wants in car-load lots. The benefit derived from the concentration of business interest is shown by the fact that \$200,000 worth of registered and grade Holstein cattle have been shipped from this one point during the past year. Not infrequently a buyer wants an animal of a certain age, and if the breeder does not have what is wanted the buyer is referred to his neighbor who is ready to supply the demand. By the breeders' working for each other in this way, they not only advance their own interests, but the interests of the entire community.

At other points in Wisconsin the Guernseys are being pushed in the same manner. The breeders are not only cooperating in the selling of cattle, but they cooperate in the use and exchange of bulls. Whenever they find an extra good bull they do not allow him to leave the community, but pass him around from one breeder to another as long as he is a serviceable animal.

Other things being equal, mature sires produce the best offspring.

This method of cooperation and concentration of breeding interests is being practiced, I believe, in Marshall County, Kansas, by the Hereford breeders. Would that there were many other communities that would cooperate by selecting some one breed of cattle, or one breed of hogs and then push that breed for both quality and numbers and thus attract numerous and influential buyers.

D. H. OTIS,
University of Wisconsin.

Western People for Beef-Production.

Bulletin No. 132, just issued by the State Agricultural College Experiment Station, Manhattan, Kans., is a detailed account of an experiment in steer-feeding at the Fort Hays Branch Station. Sixty-four head in eight lots were used. The experiment included a comparison of the roughages, alfalfa hay, Kafir-corn hay, and sorghum hay, and a mixture of these; comparison of the grains, corn-and-cob-meal, Kafir-corn, wheat, and a mixture; and a comparison of different proportions of protein. In general the results showed the very great advantage of the use of alfalfa hay and of the balanced ration.

Following is a statement of the general conclusions reached:

For beef-production, ground Kafir-corn is about equal, pound for pound, to corn-and-cob-meal when alfalfa hay is fed with either of these concentrates. However, with sorghum hay as roughage, it required 57 pounds more of the ground Kafir-corn than of the corn-and-cob-meal to produce 100 pounds gain. As would naturally be expected when the Kafir-corn hay constitutes the roughage of the ration, 232 pounds more of the ground Kafir-corn than of the corn-and-cob-meal were required to produce 100 pounds gain. Cattle can be well finished for the beef market on a ration of ground Kafir-corn and alfalfa hay.

Ground wheat and alfalfa hay, fed together, is not an economical ration for beef, on account of the loosening effect of these feeds on the steers and the expensiveness of the wheat. With corn-and-cob-meal at 45 cents per bushel and wheat at 78 cents per bushel, the cost of 100 pounds gain, when both are fed with the alfalfa as roughage, is \$5.13 with corn-and-cob-meal and with the wheat is \$8.50, or a difference of \$3.43 in favor of the former.

A matter of this experiment of considerable interest, especially to the Western farmer, is the part that the various roughages play in beef-production. A ration of alfalfa hay, at \$4 per ton, with corn-and-cob-meal produced 100 pounds of gain for \$5.13; but when Kafir-corn hay at \$3 per ton was substituted for alfalfa hay, the cost of 100 pounds of gain was increased to \$7.32, while with sorghum hay at \$3 per ton substituted for the alfalfa hay the cost was increased to \$9.06. In other words, one bushel of corn-and-cob-meal fed with alfalfa hay as roughage produced 11.8 pounds of flesh, while the same amount of corn-and-cob-meal fed with sorghum hay as roughage gave in return only 6.25 pounds of flesh; thus, a difference of 5.5 pounds, or 88 per cent in favor of the alfalfa hay ration.

There is yet much to learn about the most profitable combination of Western feeds for Western conditions, though the evidence is certainly good that it pays the stockman in dollars and cents to study this feeding problem as far as it is worked out by science and wait for further results. It is the opinion of the writer that the Western feeds grown without irrigation have the chief food constituents in a slightly different proportion from those grown under more favorable conditions, though the nutritive ratio, of the rations fed, and the profit per steer have a direct relation to each other. For practical work the results would be little changed by this difference in composition.

The nutritive ratio of the corn and alfalfa ration was 1:6.79, or practically a balanced ration, and the average profit per steer was \$8.98; the nutritive ratio of the corn and Kafir-corn hay ration was 1:14.98, or an unbalanced ration, and the average profit per steer was 90¢ cents; while the nutritive ratio of the corn and sorghum hay ration was 1:17.29, or much too low in protein and a decidedly unbalanced ration, the average loss per steer being \$1.66. The difference, then, between feeding a balanced and an unbalanced ration was an average profit, per steer, of \$8.98, with the former and an average loss, per steer, of \$1.66 with the latter; or \$10.64 per steer in favor of the balanced ration.

The results of the feeding test with 56 calves conducted at the Experiment



Farmers Say

SLOAN'S LINIMENT

Is the Best Remedy on Earth.
Kills a Spavin Curb or Splint.
Very Penetrating. Kills Pain.

DR. EARL S. SLOAN, 615 ALBANY STREET, BOSTON, MASS.



BLACKLEGOIDS

THE SIMPLEST, SAFEST, SUREST AND QUICKEST WAY TO VACCINATE CATTLE AGAINST BLACKLEG.

Needose to measure. No liquid to spill. No string to rot. Just a little pill to be placed under the skin by a single thrust of the instrument.

An Injector Free with a Purchase of 100 Vaccinations. For Sale by All Druggists. Literature Free—Write for it.

PARKE, DAVIS & COMPANY.

DETROIT, MICHIGAN, U. S. A.
BRANCHES: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Memphis, U. S. A.; Walkerville, Ont.; Montreal, Que.

Station the previous year also showed alfalfa hay superior for beef-production to prairie hay, oats straw, or sorghum. With alfalfa as roughage, 545 pounds of corn were fed for each 100 pounds of gain; with prairie hay as roughage, 641 pounds; with oats straw, 717 pounds, and with sorghum hay as roughage, 715 pounds of corn were required to make, in each case, 100 pounds of gain. From this test it was also demonstrated that barley and alfalfa hay make a very good ration for fattening calves, though not quite the equal of corn and alfalfa hay. However, with more mature animals, it may not compare so favorably with the corn ration. Wheat, at the present price, did not make an economical ration with alfalfa as roughage for feeding either baby beef or more mature animals.

By increasing the acreage of alfalfa on the farm, giving more study to the proper methods of tillage for the conservation of soil moisture, and by growing crops best adapted to the soil and climatic conditions, the feeds necessary for the perfect development of the stock industry can be grown in Western Kansas with a marked degree of certainty. The West has long been the home of the cattle industry, but only in a crude way; in fact, the range cattle business chiefly, and not with the best grade of stock. Cattle were grown to sufficient maturity and shipped to the feed lots within the corn belt to be finished for the beef market. Of course, beef-production has its drawbacks, and it must be done in a judicious manner if best results are to be expected; nevertheless, the stock industry must not be neglected if our farms are to retain their fertility. Some noted herds of pure-bred cattle are already located in the West, and it is hoped that improvement along this line will be continued in the future.

The bulletin may be obtained free by addressing, Agricultural Experiment Station, Manhattan, Kans.

Last Call for the Kansas City Angus Auction.

Berry Lucas, Hamilton, Mo., whose cattle were among the principal winners in the Missouri exhibit at the world's fair at St. Louis, consigns seven head to the Kansas City sale April 3. One of the good ones of this offering is the three-year-old Ballindalloch Nosegay cow, Maple Leaf Jessica, strongly topped with the blood of the champion and sire of champions Heath or Lad of Emerson 2d. She will be sold with heifer calf at foot by the double Blackbird bull, Black Monarch of Illington, a son of the noted Black Jam, and she is also rebred to same bull. An attractive heifer is Maple Leaf Rose, also of the Nosegay family and sired by the coquette bull Corrector. Two yearling bulls, one a Nosegay and the other a Coquette and both of which are Ballindalloch families, are included. They are youngsters of much quality, one being sired by Corrector and the other by a son of Corrector, Maple Leaf Progress. A young Queen Mother and Duchess cow complete the list of Mr. Lucas' entries and these females are all in calf or have calves at foot by the Blackbird bull, Black Monarch of Illington. S. B. Dewey, Ft. Madison, Iowa,

CAR-SUL

The Disinfectant Dip That is Guaranteed.

Stronger and more efficient than any other. Absolutely harmless. Does not run the hair, crack the skin, or injure the eyes. Kills all lice and vermin. Cures scurvy, mange and all skin diseases. Heals all cuts, wounds, galls and sores. For hogs, cattle, sheep, young stock, poultry and general household use it has no equal.

Send For Free Book

on care of hogs and other livestock. If your dealer does not keep Car-Sul, do not take an imitation but send to us direct.

We Pay the Freight.

Moore Chemical & Mfg. Co.
Manufacturers of Disinfectants, 1521-03 Cassette St., Kansas City, Mo.

Fistula and Poll Evil

Any person, however inexperienced, can readily cure either disease with Fleming's

Fistula and Poll Evil Cure—even bad old cases that skilled doctors have abandoned. Easy and simple; no cutting; just a little attention every fifth day—and your money refunded if it ever fails. Cures most cases within thirty days, leaving the horse sound and smooth. All particulars given in

Fleming's Vest-Pocket Veterinary Adviser. Write us for a free copy. Ninety-six pages, covering more than a hundred veterinary subjects. Durable bound, indexed and illustrated. FLEMING BROS., Chemists, 512 Union Stock Yards, Chicago, Ill.

60 DAYS FREE

WE WILL SEND any windmill we make to

any address to be given 60 DAYS FREE TRIAL; you compare it with windmills that others sell at two to four times our price, and if you don't find our windmill runs easier, has more power, requires less attention, easier to set up and handle (any farmer can easily set it up), pumps more water, runs in lighter wind, if you don't find it stronger, handsomer, better made and worth more than any other windmill made, return it to us at our expense and you are not out one cent.

\$11.12 buys our new 1906 Kenwood all steel, nonbreakable, everlasting windmill, which anyone can set up in a few hours. \$12.08 buys our latest 1905 style, best and strongest all steel tower.

OUR FREE OFFER. Cut this advertisement out, send to us, or on a postal card or in a letter to us, "Send me your Free Windmill Offer," and you will receive by return mail, postpaid, our latest big Special Windmill Catalogue, showing a great variety of pumping and power windmills in all sizes, a great variety of steel towers, tower tanks, etc. you will get our Free Trial Offer, the most wonderful windmill proposition ever heard of.

THIS BIG 6-FOOT FULL SIZE COUCH FREE if you let us send you a windmill or other goods. You will also get this great Free Couch Offer if you will write for our Free Windmill Offer. Address, SEARS, ROEBUCK & CO., CHICAGO

is one of the largest consignors to the auction, including about a dozen head of Prides, Queen Mothers and other good strains and sired principally by Invincible Blackbird a son of Heather Lad 4th and the cow Blackcap 4th a full sister to the noted bull Black Knight. Invincible Blackbird is one of the best bred Blackbird bulls that was ever in service in America and his get in this auction are uniformly good and demonstrate conclusively the value of his blue blood. George H. Maize, Happy Valley, Mo., consigns sons of Christo of Longbranch bred by the Messrs. Escher, sired by the famous Heather Lad of Emerson 2d and out of a Heather Bloom dam sired by Heather Lad of Turlington. The cows consigned by Mr. Maize are sired by Hot Stuff, a Hero-line that was bred by Mr. Elliott and sired by the Erica bull, E Rex, a son of Imp. Kabul.

Sixty head are catalogued for the auction and a full list of the consignors will be found in the advertisement. The various offerings should attract buyers of this breed to Kansas City at this time.

Hutchinson's Sale a Winner.

C. F. Hutchinson's sale of Poland-Chinas at Norton, Kans., Saturday, March 24, was a great record-maker for this breed of hogs in Northwestern Kansas. Although the day was very stormy, there were many buyers present, and the animals brought good prices. Thirty-two head brought an even \$1,000, an average of \$33.14. W. R. Dowling, of Norcat, topped the sale with a 2-year-old sow at \$80. The next highest price was \$66 paid for a yearling gilt by R. H. Geir, of Oberlin, Kans. Col. Bert Fisher, of Topeka, Ind. Kans., cried the sale. Mr. Fisher is well known to the breeders of Northwestern Kansas and he always gets good prices. The following is a complete list of the animals sold and the prices paid therefor:

1. Ed. Inman, Oberlin.....	\$45.00
2. J. Hackney, Norcat.....	39.00
3. W. R. Dowling, Norcat.....	50.00
4. Frank Michael, Summerfield.....	55.00
5. Jas. Holmes, Densmore.....	36.00
6. A. L. Drummond, Norton.....	30.00
7. D. M. Ward, Norcat.....	31.00
8. H. W. McAfee, Topeka.....	25.00
9. R. H. Weir, Oberlin.....	22.00
10. H. W. McAfee.....	21.00
11. A. C. Foley, Norton.....	30.00
12. W. R. Dowling.....	20.00
13. R. H. Weir.....	29.00
14. A. L. Drummond.....	43.00
15. J. Hackney.....	66.00
16. R. H. Weir.....	26.00
17. I. B. Pritchett, Norton.....	37.00
18. R. H. Weir.....	24.00
19. Fred Kingman, Norton.....	25.00
20. E. Frey, Almena, Kansas.....	22.00
21. A. A. Shadlaw, Almena.....	37.50
22. E. Frey.....	30.00
23. J. M. Ward, Norcat.....	20.00
24. Fred Kingman.....	20.00
25. W. L. Bucclock, Norton.....	30.00
26. R. H. Weir.....	17.50
27. A. C. Foley.....	25.50
28. Fred Kingman.....	22.50
29. Earl Stoddard, Norton.....	27.00
30. F. E. Gilder, Norton.....	80.00
31. W. R. Dowling.....	
32. W. R. Dowling.....	

The Great Hereford Combination Auction at Kansas City, April 4.

When such breeders as Gudgell & Simpson, Scott & March, Dr. J. E. Logan, and others mentioned in the advertisement in this issue, unite for a combination auction, Hereford breeders generally understand that high class animals will be the rule there and that culls will not be in evidence and that fair treatment will be accorded in every way to all bidders and purchasers at this auction. The blood of the great Anxiety 4th, The Grove 3d, Imp. Improver, Hesiod 29th, March On, Columbus, and numerous other noted sires will be found concentrated in these animals. The Dr. Lagon sale of fifty head on April 5, the day following this combination sale, renders this a grand time

for those interested in Herefords and those desiring herd headers or to add attractive females to their herds, to take a trip to Kansas City. The character and quality of the various offerings will well repay them for it and we hope to see the auctions well attended.

The Heath Shorthorn Sale.

In this issue will be found the announcement of the seventh annual sale of Shorthorn cattle from the Heath ranch, two miles south of Republican City, Neb. The sale is on April 4, Wednesday, and will consist of some thirty head or more of young cows, heifers and bulls from this, one of the oldest established herds in southwestern Nebraska, and one of the best consignments ever offered. Nearly one-half of the offering is good, strong, lusty young bulls, from ten months old up. The young cows and heifers are nice young, well-bred animals, from a milking strain of cows, by well-bred sires, such as the straight bred Scotch bull Lancaster Royal 188270 by Imp. Prince Odoric, etc., Golden Victor Jr. 175464. While the latter bull is the sire of most of the offering, the cows old enough to breed are in calf to Lancaster Royal. Several are by Aberdeen Lad 154974 one of the grand herd bulls. In this sale are three fine Double Standard Polled Durham bulls that are bred along good dairy lines.

Besides the cattle, there will be sold a lot of high-grade Percheron horses and several teams of work horses and bred Poland-China gilts, farm implements and other utensils, thus making it a very important sale. The catalogue is out and will be sent on application. Send for it and come to the sale and it will be a day well spent, whether you buy or not.

The Butler, Mo., Sales.

U. S. Ison, M. G. Sellon and J. L. Gere combined their herds and made a sale of Poland-China swine and Shorthorn cattle at Butler, Mo., on Friday, March 23. Although hampered by unfavorable weather conditions which served to reduce the crowd of buyers, they made a fairly satisfactory sale of Poland-Chinas. The Shorthorn sale was disappointing.

Twenty-eight head of Poland-Chinas sold for \$905, averaging \$32.32. Eighteen sows and gilts averaged \$39.36 and 10 boars, 5 of which were late fall pigs, averaged \$19.65.

The 16 Shorthorns in the sale were nearly all bulls that ranged in age from August calves to 18 months old. Because of the rain and the small crowd, these cattle sold low. Those who bought hogs were H. H. Harshaw, Butler, Mo., R. E. Blatt, Clinton, Mo., T. A. Church, Lone Elm, Kans., W. G. Sellon, Butler, Mo., L. G. Thomas, Butler, Mo., L. T. Paddock, Butler, Mo., J. L. Gere, Butler, Mo., Jas. Brown, Butler, Mo., G. W. Taylor, Butler, Mo., D. V. Stall, Lone Elm, Kans., F. D. Winn, Mastin, Kans., and W. Woody, Butler, Mo.

Diamond Creek Horse Sale.

Hon. J. W. Creech, of Herington, Kans., held his second sale, comprising a draft of Standard-bred horses from his Diamond Creek stock farm. The offering consisted of a few brood mares, young stallions, geldings and youngsters. The sale was held at the farm adjoining Herington on March 26, and notwithstanding the disagreeable day there was a good attendance and splendid prices were realized and every thing catalogued sold except a few of the younger colts, besides a number of horses were sold that were not catalogued. Thirty-two head sold at an average of \$180.

The top price was \$685, for Anglebar 0707, the bay horse sired by Escobar, which went to C. A. Trueman, Ottawa, Kans. \$500 was paid for Montgomery Ward 35435, sired by Pilatus 2:09 1/4, which went to B. Hochensmith, Abilene, Kansas.

A chestnut stallion colt sired by Es-

cobar sold for \$400 to J. B. Case, of Abilene.

The principal buyers of the sale were as follows: E. Hochensmith, Abilene; C. Q. Furness, Ottawa; H. M. Cotten, Leon; J. B. Case, Abilene; Geo. Etherington, Abilene; C. F. Estes, Abilene; F. M. Robinson, Solomon; H. E. Bacon, Herington; S. P. Cookson, Junction; Dave Nail, Herington; Jacob Snyder, Abilene; A. B. Robbins, Abilene; G. S. Hoffman, Abilene; R. T. Rindt, Woodbine; R. Hollingsworth, Solomon; Theo. Sanderist, Enterprise; Allen Moyett, Herington; G. W. Nave, Herington; Fred Sanghooover, Herington; Dr. Conklin, Abilene; Henry Keel, Abilene; Henry Shanter, Herington; Jno. Pratt, Herington, Kans.

The New Home of Sutton's Daddies.

Mr. Chas. E. Sutton, who for many years has been prominent as a breeder of Aberdeen-Angus cattle and Berkshire swine at Russell, Kans., has lately moved his lares and penates to his farm near Lawrence, Kansas. Since this removal there has been no decrease in the demand for these good "daddies." Sales lately made include 5 bulls to the Capital Syndicate of Texas; 1 to F. O. Cresswell of Texas; 1 to John Fitzpatrick of Texas; 3 to Dr. Darrett & Son of Wallace County, Kansas; 1 to John Meyer of Lincoln County, Kansas; 1 to Guy St. Aubyn of Russell County, Kansas, and an imported bull to H. A. Cole of Chicago. The latter sold for \$725. Sutton's blacks seem to spread out over the earth.

An Attractive Angus Auction.

Eight breeders of the "market topers" whose names will be found in the advertisement in this issue will unite in a combination auction at Kansas City on Tuesday, April 3, under the management of W. C. McGavock, of Springfield, Ill. T. J. McCreary, Highland, Kans., consigns seven head. The bull Black Knight of Highland 4th, a double Blackbird, has the distinction of being No. 1 of the catalogue. He was sired by Imp. Blackbird Baron of Advie, an Erica topped Blackbird, whose four grandsires and dams were bred by Sir George MacPherson Grant of Ballindalloch. Black Knight of Highland 4th was out of the double Blackbird cow, Blackbird of Highland 2d, and whose sire Black Knight of Estill 7th was a son of the great Heather Lad 2d, and whose dam Blackbird of Turlington 8th is the dam of Blackbird of Emerson the dam of the noted Blackbird bull, Black Monarch of Emerson. He is a bull of grand scale, and his pedigree is all that could be wished and, as he was a year old last September, he is just the age to do some breeder a lot of good. Another yearling son of Imp. Blackbird Baron of Advie. Mr. McCreary consigns in the Trojan-Erica, McCreary's Eric. He was out of a dam that traces maternally to Imp. Eone and was sired by the Abbess bull, Axtell of Estill. The dam of this bull is named Bona Mack and she is also included in the auction and due to calve before sale time to the service of the Blackbird bull. Three yearling queen mothers daughters of this imported Blackbird bull are also catalogued by Mr. McCreary. They are good individually and their pedigrees are right. The outstanding Angus sire of to-day is Black Monarch of Emerson. A daughter of this bull was champion at the World's Fair, at St. Louis, and of the last two International Expositions, and as Black Monarch of Emerson died last year, his get are rendered all the more valuable and there are few of them to be offered at auction. R. S. Williams, Liberty, Mo., offers on this occasion a daughter of this celebrated bull in the four-year-old cow Miss Monarch Williams, and she was out of a daughter of Black Magic a full brother to Black Monk. Mr. Williams has sold at Kansas City, as many good cattle as have been presented there from the herd of any one Angus breeder. Last year at the show and

RUPTURE

New Scientific Appliance, Always a Perfect Fit—Adjustable to Any Size Person—Easy, Comfortable, Never Slips—No Obnoxious Springs or Pads—Costs Less Than Many Common Trusses—Made for Men, Women or Children.

Sent on Trial

I have invented a rupture appliance that I can safely say, by 30 years' experience in the rupture business, is the only one that will absolutely hold



C. E. Brooks, the Inventor.

the rupture and never slip and yet is light, cool, comfortable, conforms to every movement of the body without chafing or hurting and costs less than many ordinary trusses. There are no springs or hard lumpy pads and yet it holds the rupture safely and firmly without pain or inconvenience. I have put the price so low that any person, rich or poor, can buy, and I absolutely guarantee it.

I make it to your order—send it to you—you wear it, and if it doesn't satisfy you send it back to me and I will refund your money.

That is the fairest proposition ever made by a rupture specialist. The banks or the postmaster here in Marshall will tell you that is the way I do business—always absolutely on the square.

If you have tried most everything else, come to me. Where others fail is where I have my greatest success. Write me to-day and I will send you my book on Rupture and its Cure, showing my appliance and giving you prices and names of people who have tried it and been cured. It is instant relief when all others fail. Remember I use no salves, no harness, no lies. Just a straight business deal at a reasonable price.

C. E. Brooks, 1630 Brooks Bldg., Marshall, Mich.

sale held there, he won the female championship and he this year offers a full sister and numerous daughters of her sire Zaire 17th, one of the best breeding bulls to be found in the country. The catalogue of this auction should prove interesting to all breeders and admirers of the Angus, and will be mailed on application to W. C. McGavock, sale manager, Springfield, Ill.

The Ashcroft Shorthorn Sale.

Perhaps the most attractive feature of the A. M. Ashcroft sale of Shorthorns which will be held at the home farm near Atchison, Kans., on April 10, will be the 27 solid, dark-red cows and heifers that will be offered safe in calf to their great herd bull, the pure Cruickshank Victoria, Scottish Minstrel 234970. This will be the only sale of the season, so far as we can learn, where such an array of good red cows will be offered that are bred to a pure Cruickshank bull.

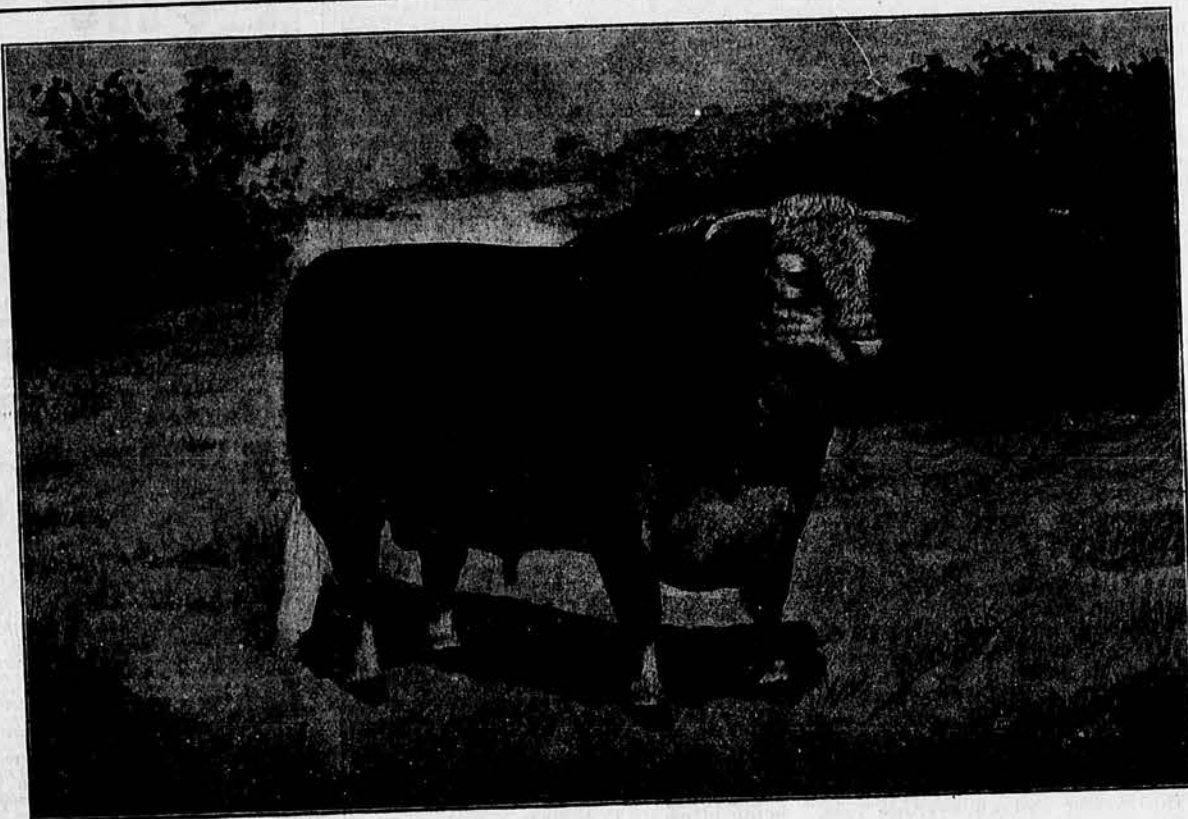
The 15 bulls in this sale are as good as their sisters, and of the same solid colors. Five of these are large growthy chaps sired by Acomb Duke 18th who is well known as a breeder among Shorthorn men. The good bull, Harmony's Knight, is the sire of the ten younger bulls in the offering. He is also a Scotch bull and one of the best in Kansas. There will be free carriages at Carter's livery barn in Atchison ready to take buyers to and from the sale. Lunch will be served at noon and the sale will begin at 1:30 p. m. Remember the time and place and be there to get these cattle.

Do You Need a Bull?

If you are in need of a bull you should write Hoadley & Sigmund, of Selden. They have only four bulls left and you can get them right. These gentlemen while new to Kansas people are old and experienced Shorthorn men, having started their herd eighteen years ago at Cedar Rapids, Iowa, and just recently moved it to Kansas. These gentlemen have spared neither time nor money in building up their herd. Much of their foundation stock was purchased from Secretary of Agriculture James Wilson when he dispersed his famous herd several years ago, and in the herd you will find animals from the famous families of Young Mary, White Rose, Pomona, Secret Arabella, Lady of Athol, Dalciabella, Young Phyllis, Wiley, etc., the get of some of the most noted sires in the West. The bulls they have left are either pure Scotch or Scotch tops, and range in age from eighteen to twenty-two months old. You can make no mistake by purchasing from them.

Southeast Kansas Breeders' Association Sale.


In the Shorthorn sale at Fredonia, Kansas, April 13, 1906, under the auspices of the Southeastern Kansas Breeders' Association, will be sold a number of pure Scotch cattle that will interest any of the best breeders of Shorthorns, in fact, all the offering are of breeding and merit that is desirable in any herd. Mr. Hanna, of Howard,



GOVERNOR 73392.

One of the great sons of Anxiety Monarch 63204. There will be sold at public auction on April 18, 1906, at Superior, Neb., about 50 head of choice Hereford cattle, consisting of cows sired by the great sire, Anxiety Monarch with calf at foot, and others in calf; also the blood of Ancient Britton and Vincent 2d 42942, both World's Fair winners in 1893; also sons of the great Beau Donald 28th 105168. Breeders of Hereford cattle this sale is worth your attention. For catalogue write W. N. Rogers, McCook, Neb.

Warranted to give satisfaction.



GOMBAULT'S CAUSTIC BALSAM

A safe, speedy and positive cure for

Curb, Solint, Sweeny, Capped Hock, Strained Tendons, Founder, Wind Puffs, and all lameness from Spavin, Ringbone and other bony tumors. Cures all skin diseases or Parasites, Thrush, Diphtheria. Removes all Bunches from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc., it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address: THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio.

has imported more high class herd bulls than any other Western breeder and the cattle in this sale are largely by the great bulls he imported: Mariner, Collynie, Lord Cowslip, Inglewood and other great sires were bought in Scotland by Mr. Hanna and if it is said an animal is Hanna bred it is a guarantee of an individual of superior merit. Mr. Hanna has selected some excellent cattle for this sale as have the other consignors. Besides the animals by the Hanna bred or imported bulls will be some of Imported Choice Goods, Imp. Lillyclain, Battle Ax, Golden Victor Jr., Scottish Emperor, etc.

The consignors have all been for months planning this sale and have reserved and fitted their consignments especially for this sale. If you have not yet received the catalogue, address H. E. Bachelder, secretary, at Fredonia, Kansas, or either of the consignors at their respective addresses, and kindly mention THE KANSAS FARMER.

The Johnson County Breeders' Association Sale.

The Johnson County Breeders' Association will hold a cattle sale at Olathe, Kansas, April 6, when they will sell 40 cattle, 32 Shorthorns and 8 Herefords, about equally divided as to bulls and females. Mr. Hayes, secretary of the association, has selected 6 head from his herd of good ones and the other consignors are all selling an excellent lot of useful, well-bred cattle. J. S. Ferguson is selling his herd bull, Admiral, bred by E. O. Cowan and sired by Velvetten Prince. Also a 3-year-old heifer by the great Alice's Prince and a young Phyllis bull out of a Duncan bred cow. J. S. Hoover sells 3 cows and heifers tracing to Imp. Alexandria 6th, bred by W. S. Marr. Mr. Hayes sells a young Mary cow bred by C. C. Norton, of Iowa, close to calving, bred to Lord Bauff 2d, a son of Imp. Lord Bauff.

Two other good cows, one by Cherry Grand Duke 2nd with roan cow calf at foot by Lord Bauff 2nd. The other tracing to Imp. Adelaide with cow calf at foot by Royal 167522 a Cruickshank Victoria bred by Cal. Haines; a young casey cow, bred to Lord Bauff 2nd, is also included.

The Herefords are well-bred cattle, descendants of animals from the herds of some of the best Missouri breeders and have been selected for this sale by their owners, realizing that the good ones alone are wanted. Send at once for catalogue to H. E. Haynes, secretary, Olathe, Kansas. Kindly mention THE KANSAS FARMER.

Shorthorns at Atchison.

The uniformity of A. M. Ashcraft's sale offering of Shorthorns is noticed by all who have seen them. If you will notice the line of breeding that produced them, it will be found that they have descended from two imported families of Young Marys and Galatea and have all been sired by the herd bulls used in the herd. The cows and heifers are a very even, all-red lot and all in calf to the good son of Imp. Scotch Mist, Scottish Minstrel, a pure Scotch bull of great beef character. The bull portion of the offering consists of 15 head, 5 great big strong fellows ready for pasture or range use and the others are just about a year old of the blocky, easily-fleshed type so much in demand. If you have not yet received the catalogue, write a card to Mr. Ashcraft, Atchison, Kansas, asking for the same.

Howey's Public Sale.

On Wednesday, April 4, at his farm southeast of Topeka, Mr. V. B. Howey, will sell a draft from his herd of Poland-China swine. In this draft there will be included 13 head of bred sows and gilts. There will also be seven boars, two of which are his herd boars, Klondike Jr., 63129 and Proud Ryes Sunshine 63003. This will afford an excellent opportunity for buyers to get some of the stock which Mr. Howey has bred so long and so successfully. At the same time and place, Mr. Howey will sell 3 head of milk cows and 3 heifers that will be fresh in the summer; also a span of black horse-mules coming two year old. A number of agricultural implements, including a 3 horse-power gasoline engine, will also be sold. Remember the time and place

and meet Mr. Howey at his sale. One of Mrs. Howey's famous lunches will be given the buyers at the noon hour.

Gossip About Stock.

E. A. Kramer, of Plainville, Kans., is just starting in the hog business. He has gathered in several good sows and judging from the animals he has purchased, is an excellent judge of hogs, which is one of the necessary qualifications for a successful breeder. Mr. Kramer will have some good foundation stock to offer the public this fall.

C. G. Cochran and Sons, of Plainville, Kans., are starting a fine herd of Shorthorns. We bespeak for these gentlemen a successful business. Mr. C. G. Cochran is president of the First National bank of Plainville and one of the successful business men of Western Kansas.

N. F. Shaw, of Plainville, Kans., has what is said by judges of good cattle to be one of the best herds of Shorthorns in Kansas. Mr. Shaw has recently headed his herd with a son of Gallant Knight, which he purchased from T. K. Tomson & Sons, Dover, Kans.

Saunders & Maggard, of Flemingsburg, Ky., have recently shipped to Salina a carload of Kentucky jacks, where they will be sold at private sale. If you need an animal of this kind it will pay you to see these jacks. They are the large, heavy-boned individuals, and good breeders. No one can make any mistake by purchasing a jack at this time. The demand for mules is far greater than the supply and they are bringing high prices. If you will buy a good jack such as these gentlemen have, you will have no trouble in getting all the work he can do. Go to Salina and see them. Saunders & Maggard.

Wilkie Blair, owner of the Beulah Land Farm Herd of Red Polled cattle, writes as follows: "My ad. in the KANSAS FARMER has brought me many inquiries for Red Polled cattle. One man wants a carload of bulls. I have recently made the following sales: Two-year-old cow to S. V. Mulkey, Waynoka, Okla.; yearling heifer to W. J. Johnson, Hiattville, Kans.; bull calf to Chas. Puterbaugh, Iroquois, S. D. I have three choice bulls nearing a year old for sale, and some younger ones which will make herd-headers, out of cows winning at the St. Louis World's Fair, and sired by our herd bull, Linwood Lad 9492-K. 25, who won 2d in class at 2-year-old, and at head of aged herd, winning 3d at World's Fair, his sire being the famous Majoloni 3600-L. 9 who won the Royal championship two years in succession. These young fellows are the best ever bred at Beulahland."

G. E. Newton is the successor to the firm of Newton Bros., Whiting, Jackson County, Kansas, which partnership was dissolved on March 8, 1906. Mr. G. E. Newton, who has been the active and responsible member of the firm, makes the following statements: "In order that all who may be interested may understand exactly, I will give a brief history of the herd and myself. I was born in Illinois, but I have lived in Kansas 33 years. Ever since I was 12 years old I have owned and fed stock (cattle and hogs). I have been manager for the herd since it was established; I did all the buying and selling. The breeding and feeding was also done under my direct supervision, when I did not do it in person. My brother and past partner did not take to the occupation and desired to try other business, hence our separation. The herd of hogs was established February 10, 1898. Two years later my brother came in with me. The B. P. Rocks was added in 1899. We always carried a herd of choice high-grade Shorthorn cattle, but in October, 1904, we sold these cattle and I invested personally in some choice registered Shorthorn cattle. Previous to 1898 I handled Poland-China swine for six years. From 1898 up to date I have personally sold over 1,400 head of Durocs for breeding purposes, besides all culls that went to market."

We wish to thank all our customers for favors and courtesies extended to the firm of Newton Brothers, and will say that all who do business with me in the future will deal just as they did when we were in partnership, as I was the one you all bought of or sold to. If square dealing will merit your patronage and friendship, I shall be confident of your business and friendship in the future. Address all letters or cards in the future to G. E. Newton, Whiting, Kans., Route No. 1.

The Farmer and the Hen.

Census reports show that 88 1/2 per cent of American farmers keep poultry. Why the other 11 1/2 per cent don't, is something of a puzzle, because the farmer usually has an eye to the main chance. Every man with an acre of ground at his disposal ought to get ready for the coming boom in the poultry business. Demand is constantly forcing increased production, and it is no exaggeration to say, that the value of poultry products in the United States will soon pass the three hundred million mark. If this is so, why not learn the secret of poultry success, and get your share of profit? It is a fact worth noting, that successful poultrymen always give their laying stock a daily dose of Dr. Hess Poultry Pan-a-ce-a in the feed. They would tell you that this is almost as necessary as the feed itself, and back their contention with abundant proof in the way of results. This method has reason and common sense back of it, because it is impossible for the hen in confinement to get the elements Nature intended for growth, maintenance, and egg-production, and even when at liberty she still needs the correcting and invigorating influence of such a tonic.

Dr. Hess Poultry Pan-a-ce-a meets this need by supplying iron to the blood, and nitrates to help Nature in

throwing off all poisonous substances. You can readily see if these necessary elements are given, the hen must be healthy and prolific. Experience has proved again and again that no flock can be diseased when Dr. Hess Poultry Pan-a-ce-a is given as directed. A very little once a day in soft feed, compels the hen to fully digest her food, and use each part in just the way Nature intended, so that bone, flesh, feathers and eggs are each, provided for in a healthy and natural manner without taxing the vitality of the hen.

For these reasons Poultry Pan-a-ce-a (prepared by Drs. Hess and Clark, of Ashland, Ohio) is a guaranteed egg-producer. A careful test will prove its value. Separate a few hens for two weeks' time and give them Dr. Hess Poultry Pan-a-ce-a as directed. Compare this performance with that of an equal number of hens which have none of this preparation, for the same period, and you will have no doubts of its value as an egg-producer. Drs. Hess and Clark are so sure of the remarkable results to be had from the use of Poultry Pan-a-ce-a that they give a written guarantee with every package. If it does not pay you several times its cost, they cheerfully return your money. If you are in the poultry business for profit you can not afford to get along without Dr. Hess Poultry Pan-a-ce-a. Use it every day, and occasionally sprinkle hens, nests, and roosts with Instant Louse Killer, if you want results.

"It Makes Stock Thrive."

And that's what you want—thrifty stock, for "Thrifty stock makes a thrifty farmer." Standard Stock Food has been used by hundreds of thousands of farmers for more than twenty years to improve the appetite and promote the digestion of all live stock. It makes the feeding ration more palatable, improves the appetite, stimulates the flow of all digestive juices—enabling the animal to get more good from the ration, and making the ration go farther. Many of our readers are now using it with most satisfactory results; they prefer the standard—not only because it does the work so well, but also because of its economy; a dollar's worth of it contains more feeds than a dollar's worth of any other. Better results for less money. If you are not using the Standard, ask your dealer about it. If he does not handle it, send his name to the Standard Stock Food Co., 1500 Howard St., Omaha, Neb., and tell how much stock you keep, and the manufacturers will send you their 160-page book, "The Standard Feeder," full of practical, every-day suggestions for making more money from your stock of all kinds.

P. R. Coseman, Newark, N. J., writes: "If I had known of Dr. Sloan's Nerve and Bone Liniment previous to August 29, I should not have passed so many sleepless nights. On that date I slipped from a step-ladder and bruised my left arm and shoulder. The doctor assured me that no bones were broken, but that the muscles and nerves were strained, which in his opinion was worse than a break. After using several dollars' worth of prescriptions, without any result whatever, I concluded that I should always be a cripple. On December 12, I stepped into a drug store and got a 25 cent bottle of Sloan's Liniment, and the instant that I applied it as per directions, I got relief; in fact it acted like magic. I have now only used it seven days and my arm is almost well. The liniment can not be too highly recommended, and I shall make it a point to solicit the trade to keep it whenever I can do so."

Topeka Business College News Items

New Term begins April 2, 1906. Nine students went from school into positions last week. Students from this school took positions in fifteen States and three Territories last year.

In addition to placing all graduates the school also placed in positions the past year ninety-four students who had not yet completed the course.

O. D. Wilkerson, of Washington, D. C., is visiting in Topeka. Mr. Wilkerson is a hustler and has made steady advancement in the civil service since completing his course at T. B. C.

Chas. Fleisch, the youngest graduate of this school, was among the visitors recently. Charlie now has a position with the Colorado Iron and Fuel Co., at Pueblo, Colorado, at \$1,800 per year.

Mr. Edward Bartel, who, after leaving school had considerable experience as stenographer in the City of Mexico, and Central America, is now located at Mansfield, La. Ed's visit last Friday was much appreciated. He always has a lot of interesting things to tell.

Students who took positions last week:

Miss Lillian May, Bookkeeper, with Ewart Lumber Co.

Miss Anna Tucker, Stenographer, with Hypes Supply Co.

Mr. O. Ritchie, Stenographer, with Mail and Breeze.

Mr. Carl Blecha, Stenographer, with Topeka Bridge & Iron Co.

Mr. Arch Brunton, Stenographer, Rock Island Offices.

Mr. W. Wallace, Stenographer, A. T. & S. F. General Offices.

Miss Bertha Louis, Telegrapher, Postal Telegraph Co.

Mr. Clarence Dreyer, Telegrapher, Postal Tel. Co.

Mr. Geo. McCleery, Telegrapher, Santa Fe at Melvern, Kans.

When writing advertisers, please mention this paper.

I CAN CURE CANCER

At Home Without Pain, Plaster or Operation and I Tell You How, Free.



I Have Proven Cancer Can be Cured at Home No Pain, No Plaster, No Knife.—Dr. Wells

I have discovered a new and seemingly unfailing cure for the deadly cancer. I have made some most astonishing cures. I believe every person with cancer should know of this marvelous medicine and its wonderful cures and I will be glad to give full information free to all who write me tell and me about their case.

Peter Keagan, Galesburg, Ill., had cancer of the mouth and throat. Doctors said, "no hope," Mr. Keagan wrote: "It is only a question of a short time—I must die." To-day his cancer is healed up and he is well. My marvelous radiated fluid did it. It has other just such cures to its credit. It is saving people every day and restoring them to health and strength. If you have cancer or any lump, or sore that you believe is cancer, write to-day and learn how others have been cured quickly and safely and at very small expense. No matter what your condition may be do not hesitate and tell me about it. I will answer your letter promptly, giving you absolutely free, full information and proof of many remarkable cures. Address, Dr. Rupert Wells, 1251 Granite Bldg., St. Louis, Mo.

You Must Sleep.

If you cannot, it is due to an irritated or congested state of the brain, which will soon develop into nervous prostration.

Nature demands sleep, and it is as important as food; it is a part of her building and sustaining process. This period of unconsciousness relaxes the mental and physical strain, and allows nature to restore exhausted vitality.

Dr. Miles' Nervine brings refreshing sleep, because it soothes the irritation and removes the congestion.

It is also a nerve builder; it nourishes and strengthens every nerve in your body, and creates energy in all the organs.

Nothing will give strength and vitality as surely and quickly as Dr. Miles' Nervine.

"During the past winter I had two attacks of LaGrippe which left me very weak, and in bad condition. I was so nervous I could not sleep. My wife, after trying different remedies, went for a doctor. The doctor was out, and a neighbor recommended Dr. Miles' Nervine, and she brought home a bottle. I had not slept for some time, and had terrible pains in my head. After taking a few doses of Nervine the pain was not so severe, and I slept. I am now taking the second bottle, and am very much improved."

HENRY M. SMITH, Underhill, Vt.

Dr. Miles' Nervine is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails, he will refund your money.

Miles Medical Co., Elkhart, Ind.

Sheridan County Land

ARE YOU LOOKING FOR LAND? DO YOU WANT A HOME?

In the great wheat and corn belt of Kansas, where land sells from \$10.00 to \$25.00 per acre. If so, write us your wants. All communications promptly answered. Write us.

TRIMBLE & TRIMBLE, Selden, Kans.

Miscellany

Remarks About Birds in Regard to Fruit and Insects.

BY ELBERT S. TUCKER, MUSEUM ASSISTANT IN SYSTEMATIC ENTOMOLOGY, UNIVERSITY OF KANSAS, LAWRENCE.

Much argument has been spent in advocating the protection of song-birds for the service they bestow in feeding extensively on insects largely injurious, but the fact remains that their depredations to many kinds of fruit, when it becomes ripe, presents a serious side to the subject. Since my article entitled "The Destruction of Fruit by Birds in Sedgwick County," was published in the KANSAS FARMER of November 20, 1902, I have been anxious to learn what tendencies are exerted by birds in their relations to fruit and insects in other parts of Kansas and in other States, particularly of the West, and have accumulated various short references, which, being reproduced here, contribute to a further consideration of the question through expressions of the views of other observers in addition to my own remarks. A notice that has evoked my attention at this time appeared in the Lawrence World of December 20, 1905, and read to this effect:

"The following press dispatch, dated at Champagne, Ill., appeared in a morning paper: 'Because the students of the Kansas University, at Lawrence, hunted and killed birds that ate insects, and robbed their nests in pursuing their studies, that section of Kansas has not had an apple crop for six years,' was the statement of B. F. Smith, of Lawrence, before the Illinois State Horticultural meeting held in this city. Not all the damage was done by the students; other boys and hunters helped to exterminate the bug-eating, winged creatures until the State, at the last session of the legislature, passed a law prohibiting hunting without permission of the landowners."

The charge against the students of the University, at least as applying to recent years, was, however, emphatically denied by Professor L. L. Dyche, curator of the bird collections.

To prove that birds have been plentiful in Douglas County, if not too much so, even within the period mentioned, a complaint of their destruction of fruit which came to notice in the Lawrence Journal of June 26, 1903, is here produced:

"Mr. Greenlees, southeast of town, who has a large amount of berries, says that flocks of blackbirds are taking his berries as fast almost as they ripen. This is not a new complaint, for the blackbirds is sometimes almost as great a nuisance as the English sparrow."

In making direct inquiry to the source of this report, I received this answer: "Your card of inquiry about the blackbirds is received. In reply will say they helped themselves quite freely to my raspberries for a short time and then left as suddenly as they came. The loss was trifling and not worth reporting. Yours respectfully, A. GREENLEES."

As the extent of land now covered with trees and shrubs is much greater than in former years with respect to Douglas County as well as elsewhere in the State, the spread of arboreal influences would indicate that birds should be more numerous than ever known before; as least, such has been the case in Central and Western Kansas. The amount of loss inflicted on fruit by birds depends on local conditions to a great degree. On the prairies, wild fruit is seldom found, hence the birds are greedily attracted by cultivated varieties. Their attacks on grapes raised in this region are especially severe. Each year only brings a repetition of their plunders in the same manner as described in my former article treating of observations in Sedgwick County. During the last few seasons, however, the yield of grapes has been slight, but whatever there was, the birds got the most of it when not protected. Here the fruit-grower can not afford to bear the loss of a considerable portion, or perhaps the greater part of his crop, out of pure sentiment for the birds.

Wholesale slaughter may seem to be a terrible recourse to enforce against the birds, but either the birds must be subdued or the growing of certain fruits abandoned in those sections. Possibly a remedy or mitigation for the trouble may be provided in time by the raising of mulberries or something else to satisfy the bird-appetite, but it can not be for present purposes. While the amount consumed by a single bird is

trifling, the extent of all losses incurred results from the combined attacks of a great number of one or more kinds. Examinations of the stomach contents of birds accused of marauding in orchards and vineyards have failed to show that they eat scarcely more than perceptible amounts of fruit in proportion to other food. However, birds are sometimes the means of destroying far more than they actually eat. The slight evidences of either fruit or its seeds being found in the stomachs of those examined does not by any means indicate the wanton tendency exerted in their attacks upon grapes, or, if such evidence be entirely lacking, should they be considered innocent of doing any damage at all, when instead, as I shall show, they can be guilty of causing extreme havoc. Why these investigations fail to sustain the condemnatory charges against the birds is, in my opinion, because the birds do not eat grapes, unless rarely; they merely take a sup or two of juice from each berry which is ripped open, one after another, in rapid succession, thereby ruining whole bunches. All they generally swallow, then, is a little juice. My conclusions to this effect are based on frequent observations of birds while attacking grapes on the vine. Besides the wrecked bunches tell the story plainly enough. Regarding this trait, I have found no mention in reports of Government investigators or otherwise, though the advisability of having ponds or other supply of water available to birds in hot, dry weather, has been suggested. Perhaps this is a matter of thirst rather than appetite.

Judging from the experience of a lady living at Kinsley, Kansas, the prospect of growing grapes to maturity that far West appears practically hopeless. Some grape-vines had been trained on a trellis in the yard near her house, and they bore abundant fruit, but she never succeeded in saving any from the birds unless she picked the grapes before they fully ripened. One year the lady tied strong paper sacks over the bunches just before the time of ripening; yet the birds soon ripped them open with their beaks and riddled the fruit. Next year she provided bags made from a strong quality of cheese-cloth in the belief that the birds would surely be unable to penetrate a covering of this strength; how keenly her disappointment was felt, when, after all her trouble, she found that the birds actually forced holes into these bags with their bills and thus managed to reach and spoil the fruit within!

As evidence of how the matter is regarded by other observers, two of whom are experienced specialists in the study of birds, their comments on my former article, including suggestions for remedial measures, should show for themselves, although this will require the reprinting of all except the communication of Professor Bruner which has not been published before. His letter was written from the Department of Entomology and Ornithology of the University of Nebraska, at Lincoln, under date of December 15, 1903, and from which his words are quoted:

"Allow me to thank you for the paper on the destruction of fruit by birds in Sedgwick County, which you have so kindly sent me.

"I, myself have never seen anything to begin to compare with it on the prairies of Nebraska and I have watched birds a great deal for the past twenty-five or thirty years.

"In my talks concerning bird-protection, I suggest the planting of the Russian mulberry and other wild fruits which birds are fond of, since I have observed that wherever they have access to wild fruits they seldom pay any attention, or at least very little, to the cultivated varieties. Then, too, the placing of water where the birds can have access to it seems to assist in quenching their thirst during the hot days of late summer and early fall.

"Yours very truly,
"LAWRENCE BRUNER."

The following letter was printed in the KANSAS FARMER of January 29, 1903, under the heading, "Birds and Orchards."

"Mr. E. S. Tucker, Kansas State University, Lawrence, Kans., writes as follows:

"In referring my article published in the KANSAS FARMER of November 20, 1902, to the U. S. Department of Agriculture, the following reply has been received, which I submit for the benefit of your readers:

"U. S. Department of Agriculture, Biological Survey, Washington, D. C. E. S. Tucker, Lawrence, Kans.

"Dear Sir:—Your favor of the 5th instant, and the article on 'The Destruction of Fruit by Birds in Sedgwick County, has been referred to me for

consideration. If you will turn to page 33 of bulletin 54, 'Some Common Birds in their Relation to Agriculture,' U. S. Department of Agriculture, you will find that I have there described in general terms the situation of which you have given a specific example. The conditions are artificial and abnormal in every respect. When, in addition to the orchards and vineyards, artificial forests, with their accompanying fruit-bearing shrubs, shall have grown, the present trouble will practically cease. In the meantime I do not see that there is any other remedy than the one that was applied, much as I deplore such destruction of bird-life. Too many birds were collected in a limited area with the usual result. It is evident that the killing did some good as the birds were less destructive last season.

"The fruit-growers of California have been for several years struggling with the same problem but the conditions are slowly becoming more normal, in fact so much fruit is raised there that it is only in small orchards that the damage by birds is noticed.

"As I have stated elsewhere, the damage by birds usually arises from too many birds, or too many of one or a few species, collecting in a limited area. Under such circumstances the natural food-supply becomes insufficient and the birds turn their attention to other sources of supply with the consequence, usually, that some agricultural product has to suffer.

"I send herewith a copy of bulletin 54, also 'How Birds Affect the Orchard,' which shows the other side of the case. F. E. L. BEAL.

"In charge Economic Ornithology." Under the heading, "Birds and Grapes in McPherson County," the following statement appeared in the KANSAS FARMER, issue of December 4, 1902:

"EDITOR KANSAS FARMER:—I was much interested in reading an article written by E. S. Tucker, in the issue of November 20. I give my experience with fruit and birds here in McPherson County. I have been here thirty years. I find that grapes are the surest fruit we can raise. They bear every year, but I do not expect any unless I stand over them with a shot gun from the time they begin to color until they are all gone and we have to gather them before they are ripe to get any at all, because I can not watch them all the time. I will have to give up grapes unless the brown-thrushes, catbirds, and orioles are killed off. We have not many robins or mocking-birds. The orioles are the most numerous and worst. B. REICHAERT.

"McPherson, Kans." Another statement from the same person appeared just recently (in issue of February 22, 1906 KANSAS FARMER), under the heading, "Fox Squirrels—Birds and Fruit," which presents the situation up to date:

"EDITOR KANSAS FARMER:—We have plenty of what they call fox-squirrels here. They are great on sweet corn when in the roasting-ear stage; they also help themselves to corn in the crib and take care of all the walnuts.

"We also have many fruit-eating birds. They will not let a cherry or grape get ripe if they can help it. We have a good many rats here. I would rather feed rats on corn than feed birds on fruit. Now, if one is protected by law, why not protect all three, for one is as good as the other as far as usefulness is concerned. Our apples are nearly all wormy in spite of all the birds that are here. Do we not have a right to protect our crops, law or no law? B. REICHAERT.

"McPherson County." Then again in the next issue of the KANSAS FARMER (March 1), there appeared an inquiry from a correspondent in Montgomery County, who, in asking how to prevent loss of seed-corn caused by birds and other animals, intimates that birds are serious offenders in this respect.

My own contentions with birds began when I was a boy on an Ohio farm, where, in cherry time, I was sent out with an army musket and a supply of powder and shot with which to shoot the birds that came to eat the fruit. A few shots with the old gun that "kicked" at every discharge was generally sufficient to appease even a boy's ardor for shooting, and further watchfulness was induced more by the prospect of a feast on savory bird-pie to be made by grandmother should enough birds be killed, rather than for the sake of saving the cherries. Out in Kansas, however, where cherry-trees were grown after years of waiting, and the yield at first was scant as could only be expected from young trees, the persistent raids of the birds, which scarcely left any fruit long enough to become ripe, was indeed discouraging.

An opinion frequently advanced by



Kill your ducks—

don't cripple them. Shoot U. M. C. duck shells—not others almost as good. Arrows or Nitro Clubs loaded with any smokeless powder are hard hitters.

U. M. C. cartridges are guaranteed, also standard arms when U. M. C. cartridges are used as specified on labels.

THE UNION METALLIC CARTRIDGE COMPANY

BRIDGEPORT, CONN.

Agency: 313 Broadway, New York



BETTER-CHEAPER ROOFING

Have you ever paid a high price for roofing and then had it leak within a year or two? There is only one way you can prevent this from occurring again—by buying a roofing that is made right; one in which materials are used that will not rust or decay. Therefore no leaks.

Mica-Noid
READY ROOFING

is a long wool fibre thoroughly saturated with a water-proof preparation by our own "damp-proof" process, which years of test in all climates have proved will resist water and decay. We want you to know why users of Mica-Noid prefer it to tin, shingles, iron or any kind of roof material.

We want to send you copies of letters from these users; also FREE samples of roofing. They speak for themselves. ASBESTOS MFG. & ROOFING CO., 306 Carr Street, St. Louis.



CONGO ROOFING

A ready roofing that is warm, dry, easy to lay and lasting.

In appearance it looks like rubber and it is as water-tight as rubber—but there is where the resemblance ceases.

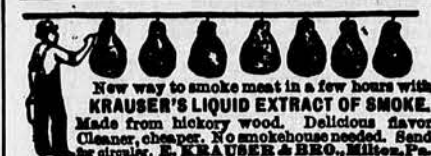
Its wearing qualities are unsurpassed—it is a splendid fire resistant—acids and alkalis have no effect upon it. It doesn't rot out nor crack. It is pliable and elastic to the end of its days.

Good for any climate, any weather, anywhere on earth.

Write for free Sample and Booklet to-day.

BUCHANAN-FOSTER COMPANY

448 Chestnut Street, Philadelphia, Pa.



WELL DRILLING MACHINES

Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on sills. With engine or horse powers. Strong, simple and durable. Any mechanic can operate them easily. Send for catalog.

WILLIAMS BROS., Ithaca, N. Y.

Farmer's Account Book and Ledger

Saves time and labor—a few minutes each day will keep it; systematizes farm accounts in every department; shows in the simplest manner how to increase profits and decrease losses; endorsed by farmers everywhere. We stand ready to refund the purchase price on every book not found satisfactory. We deliver this book postpaid, including the Kansas Farmer one year, both for only \$1.50. Address,

THE KANSAS FARMER CO.,
Topeka, Kans.

Inexperienced persons is that if some object of dread to the birds were placed in a tree, the birds would be afraid to alight there. But that "something" possessing any merit for protective effect has never been found; instead, anything unusual attracts more birds than common, at least as far as a trial of old or stuffed clothes has proved; and furthermore, the humorous experience of John Burroughs as told in his book, "Birds and Bees and Other Studies in Nature," is repeated here to show the fallacy of such notions.

"One season, to protect my early cherries, I placed a large stuffed owl amid the branches of the tree. Such a racket as there instantly began about my grounds is not pleasant to think upon! The orioles and robins fairly shrieked out their affright. The news instantly spread in every direction, and apparently every bird in town came to see that owl in the cherry-tree, and every bird took a cherry, so that I lost more fruit than if I had left the owl indoors. With craning necks and horrified looks the birds alighted upon the branches, and between their screams would snatch off a cherry, as if the act was some relief to their outraged feelings."

Mr. Burroughs' writings on birds, particularly his chapters on "Bird Enemies," and "The Tragedies of the Nests," in the book just mentioned, tend much to incite the sympathy of the reader for these creatures of precarious lives. Yet in Kansas, as in other parts of the West, there are fewer enemies to prey on the birds and their eggs than in the East under such conditions as Burroughs observed. On this account they are more successful in breeding here. All of the writings of Mr. Burroughs furnish wholesome reading, but his choicest papers, probably, are contained in the volume, "Birds and Bees and Other Studies in Nature." There are two editions of the book, one in half-leather binding at 60 cents per copy, the other in linen covers at 40 cents. Besides his paper entitled "Sharp Eyes," an essay on how to observe things in Nature, the author not only touches on birds and bees in this work, but extols the potency of fruit and flowers, and of streams, meadows and woodlands with such charm as to captivate the heart of any true lover of Nature; or perchance, the reader is reminded of familiar scenes or out-door pleasures, possibly of childhood days, with a homesick feeling. Still, after all, we who live in Kansas need not lack for natural sources of enjoyment, though they may not be just the same as portrayed by Mr. Burroughs; we have plenty to rejoice in and would not exchange places.

Trade of the United States with Europe.

Europe takes two-thirds of the exports of the United States and supplies practically one-half of the imports. This statement summarizes in a single sentence the general facts which have been developed by a series of discussions of the trade of the United States with the countries of Europe recently presented by the Department of Commerce and Labor through its Bureau of Statistics. These discussions have presented an analysis of the trade with each country of Europe by principal articles, and when summarized show that Europe takes more than a billion dollars' worth of the exports from the United States, while all other parts of the world takes a little less than a half billion dollars' worth. In no year since 1899 have the value of exports to Europe fallen below \$1,000,000,000, while that to all other countries has never touched the \$500,000,000 mark. Prior to 1900 the exports to Europe had never been as much as \$1,000,000,000 in value; in that year they crossed the billion-dollar line, being \$1,040,000,000, and have since that time averaged about \$1,050,000,000 per annum. In 1900 the exports to all sections of the world other than Europe were \$354,000,000 in value, but have grown year by year until in 1905 they were \$498,000,000, the growth since 1900 in exports to the non-European countries having been proportionately greater than that to Europe.

On the import side Europe supplies, as already indicated, about one-half of the merchandise brought into the United States. Prior to 1890 the share of the imports drawn from Europe averaged about 55 per cent; about 1890 the average was a little more than 50 per cent; in 1905 it was 48.4 per cent. This reduction in the percentage of the imports drawn from Europe is apparently accounted for by the growing demand in the United States for tropical and subtropical products which are supplied almost exclusively by the other grand divisions of the world. The value of

tropical and subtropical products brought into the United States in 1905 was \$508,000,000, against \$303,000,000 in 1895 and \$218,000,000 in 1885. Most of this class of imports comes, of course, from the non-European sections of the world; much of it from South America, especially coffee and India rubber; much of it from the southern part of North America, especially sugar, sisal, and tropical fruits; a considerable part from Asia, including tea, raw silk, and spices, while Oceania contributes sugar, spices, cocoa, and other products of this character, and Africa Egyptian cotton, India rubber, hides and skins, and a small supply of sugar.

The trade of the United States with Europe is composed on the import side chiefly of manufactures and materials for use in manufacturing; on the export side of food stuffs, manufacturers' materials, and manufactures. The manufactures imported from Europe are chiefly the higher grades of cotton, silk, and wool fabrics into which labor, and in many cases hand labor, largely enters; while chemicals, certain grades of iron and steel manufactures, toys, wines, china and porcelains, cut-plate-glass, and other articles of this kind contribute largely to the grand total. In addition to this, however, there are imported from the European countries certain articles the product of their respective colonial possessions, including India rubber, fibers, tobacco, hides and skins, wools, tin, raw silk, diamonds, and various tropical and subtropical productions. The articles exported to Europe are chiefly breadstuffs, meats, and live cattle, and fruits, for food; raw cotton for use in manufacturing, and a variety of manufactures, including copper in pigs, bars, and ingots, mineral oil, agricultural implements, boots and shoes, manufactures of wood, oil-cake, cottonseed oil, vegetable oils, naval stores, and various manufactures of iron and steel.

Of the \$1,021,000,000' worth of merchandise sent to Europe in 1905, 239,000,000 was manufactures, the other \$782,000,000' worth being largely foodstuffs and manufacturers' materials. With the growing tendency of our steadily increasing population to consume at home a larger share of the foodstuffs produced in the United States, and to increase the consumption by our own factories, the supply which can be spared for Europe is decreasing rather than increasing, and as a consequence the percentage of exports sent to Europe is slowly decreasing.

Prior to 1887 the share of our total exports sent to Europe was over 80 per cent; since that time the percentage has gradually fallen until it reached 72 per cent in 1902, and in 1905 was but 67.23 per cent of the total, while the share of the exports taken by those grand divisions to which the exports are chiefly manufactures shows an increased percentage in 1905 compared with 1904.

The fourth annual meeting of the Kansas City Alumni Association of the Kansas State Agricultural College, was held in the Pepper Building Friday night. The president of the college, Prof. E. R. Nichols, made the first short talk of the evening. He was followed by the following alumni: C. V. Holsinger, '95, Rosedale; J. R. Harrison, '88, and B. L. Short, '82, Kansas City, Kans.; and Dr. A. T. Kinsley, '99, Kansas City, Mo. The speeches preceded a buffet luncheon. It is the hope of the association to hold more frequent meetings than it has in the past and to have some special feature for each meeting. About eighty graduates and former students were present. B. L. Short, '82, of Kansas City, Kans., was elected president; Miss Bertha Bacheller, '88, vice-president; and Dr. Geo. W. Smith, '93, secretary and treasurer.—The Industrialist.

The zoological and animal husbandry departments of the Kansas Agricultural College, recently secured thirty Oregon pheasants from the State Game Warden at Pratt, Kans. The birds are for experimental work, and if the departments are successful in raising them, the birds will probably be liberated on the college farm. The State Game Warden is endeavoring to introduce the pheasants into Kansas and is interesting parties in the raising of them in the hopes of, in time, stocking Kansas woods with the birds.—Industrialist.

Sin and happiness certainly do not travel on the same car, for they are not journeying on the same road.—N. Y. Observer.

Avoid dangerous topics if you would have others think well of you.



"Western Lady" Shoes
embody the latest and most approved styles for women. They are so perfectly designed that they fit every curve of the foot gracefully and with ease and comfort. Nothing better made no matter what you pay. Ask your dealer for Mayer

Western Lady

Shoes next time you need shoes and get the best wearing, dressiest and most comfortable shoes you ever wore. Any reliable shoe dealer will supply you. If not, write to us. Look for the Mayer trade-mark on the sole. We also make the "Martha Washington" Comfort shoes.

F. Mayer Boot & Shoe Co., Milwaukee, Wis.

33 Years Selling Direct

Our vehicles and harness have been sold direct from our factory to user for a third of a century. We ship for examination and approval and guarantee safe delivery. You are out nothing if not satisfied as to style, quality, and price.

We are the Largest Manufacturers in the World

Selling direct to the consumer exclusively. We make 200 styles of Vehicles, 60 styles of Harness. Send for large free catalog.

No. 300. Canopy Top Surrey. Price complete \$63. As good as sells for \$85 more.

No. 721-34. Driving Wagon with Large Platoon Style Seat and 1-3/4 in. Cushion tires. Price complete, \$65.50. As good as sells for \$25 more.

ELKHART CARRIAGE & HARNESS MFG. CO., Elkhart, Indiana.



The Best Lister

to buy is the one that will do the most satisfactory work with lightest draft and smallest outlay for repairs, these features are all prominent in

The Tongueless Tricycle

the only lister that can be used without a pole. Bottom hangs almost directly between the wheels, and a square corner can be turned with bottom in the ground. It is frameless and has no complicated parts to break or wear out. Driver sees every kernel of corn as it drops. Actual weight 366 pounds. Write to-day for booklet giving complete description and our proposition to you.

Rock Island Implement Co.,
1810 West 18th Street. KANSAS CITY, MISSOURI

Before Buying a Plow

Send for the book on Money Making Methods in Soil Cultivation. It is a complete guide as to how to prepare your acres to get bigger crops and what style of implements to use under certain conditions of soil. Then when you have learned what would be the best plow for you to use, INVESTIGATE THE


Fuller & Johnson Line

Walking Plows, Sulky and Gang Plows, Harrows, Planters, Cultivators, Transplanters, Manure Loaders, etc. All styles in these machines and all possessing the Fuller & Johnson Standard Quality. Plows with extra hardened highly polished steel mould boards that scour in any soil. Spring lock to steady plow in furrow. High and easy foot lift, strong, durable wheels. Get the book first and then decide. Address:

FULLER & JOHNSON MFG. CO.,
119 Dickinson St., Madison, Wis.

SOIL CULTURE BOOK FREE

MONEY MAKING METHODS IN SOIL CULTIVATION



Save Your Clothes
By Washing Them in

A Gee-Whizz Washer

SENT ON FREE TRIAL

It would surprise you to know how much wear and injury clothes receive when washed by rubbing between rollers or heavy lids, jerked around by pegs, or in fact by any friction method. None of this in the Gee-Whizz as it washes by driving hot soap-suds through the clothing with force and speed, by means of water wheels. No friction on the clothes. Guaranteed to wash perfectly clean in from four to seven minutes. Galvanized steel tank. No warping and no falling apart. Adjustable to wash anything from a napkin to a quilt, or a length of carpet. Write at once for full particulars and free trial proposition.

Gee-Whizz Mfg. Co., Walker St. Des Moines, Iowa

14 INCH DOUBLE SHIN STEEL BEAM PLOW \$8.40

Made of the best Soft Center Steel all over; highly tempered, finely polished. Guaranteed to satisfy you or money refunded. All sizes, from 6-in. to 18-in. Send for Extra Share \$1.75

16-Inch Only \$8.95 Extra Share \$2

big free catalogue of Riding Plows, Disc Harrows, Listers, Cultivators, everything in the Implement Line; Buggies, Wagons, Harness, Steel Ranges, Sewing Machines, and a thousand other things sold to you direct at wholesale prices. Write now and get ready for spring work.

HARPOOD PLOW CO., 777 Front St. Alton, Ill.
18 in. " 1.50 The only Plow factory in the United States selling direct to the farmer.

Home Departments

CONDUCTED BY RUTH COWGILL.

Twenty Years Ago.

I've wandered in the village, Tom, I've sat beneath the tree,
Upon the schoolhouse playground that sheltered you and me;
But none were left to greet me, Tom; and few were left to know,
Who played with us upon the green, some twenty years ago.

The grass is just as green, Tom; bare-footed boys at play
Were sporting, just as we did then, with spirits just as gay;
But the "master" sleeps upon the hill, which, coated o'er with snow,
Afforded us a sliding place, some twenty years ago.

The old schoolhouse is altered now; the benches are replaced
By new ones, very like the same our penknives once defaced,
But the same old bricks are in the wall, the bell swings to and fro;
It's music just the same, dear Tom, 'twas twenty years ago.

The boys were playing some old game, beneath that same old tree;
I have forgot the name just now,—you've played the same with me,
On that same spot; 'twas played with knives, by throwing so and so;
The loser had a task to do,—there, twenty years ago.

The river's running, just as still; the willows on its side
Are larger than they were, Tom; the stream appears less wide;
But the grapevine swing is ruined now, where once we played the beau,
And swung our sweethearts,—pretty girls,—just twenty years ago.

The Right One.

FLORENCE SHAW KELLOGG.

How well I remember it—that bright June morning away in Southern Virginia, in the new home where we had set up our household gods—coming hither from the dear old hills of Chautauqua County, New York, in the hope of prolonging the life of the little mother who was so precious to us all. One of the

"Standing with reluctant feet
Where the brook and river meet,
Womanhood and girlhood sweet,

and who made home so good and beautiful to us we would fain keep her with us as long as possible. Our hope, thank God! was realized; for breathing the balmy air, laden with the breath of the pine-trees, brought healing to her lungs and she tarried with us for many a long, glad year in the home where "with a world of strife shut out, a world of love shut in" she led us on and taught us ever of the deep things of life, the holiness of love and service—not by words so much as by example. From her, and the noble father as well, we learned the sweet, dear habit of living together in such a way as to draw out and strengthen the best in each of us. Oh, mother! mother! where amid the beautiful fields of Paradise is thy home to-day? Wherever it may be, we can only think of thee as still living and working in the old familiar ways, and we wonder have the angels yet taught thee the depth and sweetness of thy womanhood? Hast thou yet learned how beautiful thou art, how deeply potent for good thy gracious life and ministry ever was? She was so unconscious of it all here—that dear little mother of mine. There seemed no self in her thought of life, so fully, so freely did she give her all to others, all unconscious of the truth and beauty of her character or how like an angel she seemed to us in her sweet love and patience. As unconsciously as the violets give of their perfume, she gave herself, nor knew more than did they how deep and lasting, how holy, was the work she did for those around her. How often I have pictured to myself the scene as I think it must have been when she awoke in spirit life, and those to whom she had ministered here, and those whose lives were strengthened and sweetened by the touch of her life, and who had preceded her there, crowded around to give her welcome and to tell her of it all with glad thanks and praise. How her beautiful blue eyes must have opened in sweet surprise! How sacred and yet how timid must have been her joy! It would be so hard for her to believe it all. One of the world's nameless saints was she—yet knew it not.

LOVE THE GREAT FACTOR.

But I am wandering far from that beautiful morning and the thing I would tell you. It was when I was "Glad souls without reproach or blot, Who do God's will and know it not," and was wondering in my innocent heart how I would know when I had really crossed that mystical line and was a girl no longer. We were down

in the kitchen—Sister Alice and I—busy with some little task while the two faithful black women were doing the weekly washing near by. All unmindful of them, we were talking, as girls will ever talk, of life and love and all that the future might bring us, telling of our dreams, our hopes, and our ambitions. What brought it out I do not remember, but in response to something she said, I remarked very sincerely, as I then thought, with a girl's lack of wisdom and a girl's decision, "Well, I am never going to be married. I am going to stay always at home with father and mother." Hearing a low laugh from one of the women and realizing that she had heard what I said, I turned to her with "Don't you think so, Zilla? Don't you think I had better stay always with my father and mother?" And then it was that she said the words that have stayed always in my memory: "Yeasam, Miss Flora, I reckon you had, but if bime and by de right one comes erlong and you gets to lubbin him, and he gits to lubbin you, you better go." Did she know the wisdom of her words? Did she think how she had touched upon the very springs of life and love and happy marriage? Had she, like Mary of old, pondered these things in her heart and so come to know what it all meant, or was in only one more instance of those words of wisdom that flash as if by inspiration, from the life of the unthinking and simple? Who can tell? She was an ex-slave with the dark days of bondage but a few short years behind her, so few that she had scarcely yet realized what freedom meant, and yet, who could have answered me more wisely than she had done?

The right one! the heaven appointed mate whose coming was even then so near! He whose love-call was to lead me out of girlhood and set the seal of blessed womanhood upon my brow! Ah, yes! I would "go" with him, and surely, as Zilla said, it was "better so, though the old home and its inmates were never more dear and sacred to me than when I went from it with brave, but tearful "good byes" and low murmured words of blessing.

It is this waiting or not waiting for "de right one" that makes or mars a life time. In all the years since that summer morning, years in which my home has changed from Virginia back to New York, and from there to the beautiful, sun-kissed prairies of Kansas; years in which I question deep of life and love; years in which the twin angels, Pain and Patience, have had their way with me, and have taught me many things; in all these years I have never seen a mistreated, unhappy husband and wife that I have not recalled Zilla's words and have felt that they did not wait "till de right one come erlong."

MARRIAGE IS NOT A LOTTERY.

It is often said "marriage is a lottery" and this seems to be the thought of many an honest man and woman; but I deny it. I know if it seems so, it is because men and women have made it so; because they have not been determined enough to have it otherwise; have not been honest and "square" one with the other; and have rushed into what should be considered the "holy of holies" without due thought and preparation; without trying truly to know each other and to learn if they are suited to live together in love and joy, each being the other's good angel that shall help to strengthen all that is good and to uproot or overcome all that is not good in the other.

Marriage is so sacred, so holy, its responsibilities are so great and important, its privileges so beautiful and satisfying, how shall any one dare enter upon it without most earnest thought and conversation? The wedding day may be full of sunshine, but that is but the beginning. Though the sunshine of love should never be dimmed, the after life, that of which the wedding day is but the portal, must be serious and earnest, full of "ups and downs," of trials and vicissitudes, as well as of joy and pleasures, and husband and wife must needs be suited to each other in every way to keep glad step together down the long path of life.

Nothing is more beautiful than this union of two hearts and lives in one; this consecration of the two to the upbuilding of a home, the welcoming there of the little children in holy love and gladness, living before them strong

ROYAL BAKING POWDER

Imparts that peculiar lightness, sweetness and flavor noticed in the finest cake, biscuit, rolls, crusts, etc., which expert pastry cooks declare is unobtainable by the use of any other leavening agent.

Made from Pure, Grape Cream of Tartar.

ROYAL BAKING POWDER CO., NEW YORK.

and true day by day, choosing always the better part, the growing acquaintance and knowledge each of the other that brings but deeper love and truer charity. Who shall dare call this a "lottery" or seek to cheapen and de-grade its holy offices?

BLENDING OF TWO LIVES.

To the wife who cares for her husband and her home as she should, there is no work to be compared in beauty and sacredness to that which awaits her here. The husband must go out to heavier conflicts. He must meet and wrestle with the forces of evil everywhere; must face envy, greed, and malice, and win his way through valiant effort and persistency. He lays the foundations and builds up the walls of the home, but it is the wife who makes it good and beautiful, a fair haven to which he turns for rest and cheer, where his hands are strengthened for farther work and his heart made strong for the combat. What is so like to Heaven as a true home? It is Heaven—a fore gleam of that place "not built with hands," affording a glimpse of the rest and joy that remains after "life's fitful dream is over and time is merged in eternity."

The blending day by day, month by month, and year by year of man's strength and woman's tenderness, of man's reason and woman's intuition, of man's justice and woman's love, the deepening of the passionate love of youth into the calm, sweet love of later life, the ever-growing confidence and trust, the holding of one's life in abeyance to another in "honor preferring another," the giving of all that is best and sweetest; all that is deepest and holiest each in each to the home life, the blending of all that is best in the two lives in the lives of the children, the outward blossoming of love's holiness—what is so good—what so beautiful as this? All this because one has waited until "de right one came," until heart called unto heart, soul answered unto soul in joy and gladness, and thenceforward the two life-streams flowed on in one strong, ever-deepening current, on and on, ever on to meet the mighty ocean and become a part of its crystal tides.

TRUE MARRIAGE ORDAINED OF GOD.

It is only carelessness and unthinking, only the trying to appear what one is not, that makes of marriage a lottery and a disappointment, a house built upon the sands that must fall when the storms come and the winds of adversity beat upon it. But those who are true in thought and deed, those who would be known as they really are, who fear to dissemble and scorn to act a lie, those who stand in the clear sunlight without fear because in their hearts there is no guile, no deceit, where truth meets truth and respect, where love is wise as it is true, neither disowning nor concealing the faults we each must have so long as we are human beings, but strong to acknowledge and wise to help in overcoming them, those whose love is such as this, who can bear and forbear, are those whose "house is built upon a rock," and who do not fear, however the winds may rave or the storms may beat upon it. Such as these know marriage is something too deep to be expressed in words, a something ordained of God—eternal and true as He

The American Boy MAGAZINE

The Biggest, Brightest, Best Boy's Magazine in the World



"GOOD ALL THE WAY THROUGH"

That's what the boys of America say of THE AMERICAN BOY. It develops the taste for good reading, and interests boys in all manly sports, games, and exercises. Your boy will like

THE AMERICAN BOY

because it's all boy. You will like it because of the high character of its contents. Over 400 big pages. Over 100 stories. Over 1000 illustrations. Contains real stories of travel and achievement; instructive tales of history; games and sports; how to do things, etc.

ONLY \$1.00 A YEAR

Subscription Price of "The American Boy" (1 year)..... 1.00
Kansas Farmer, 1 year..... 1.00

Total.....\$2.00
Both 1 year for.....\$1.50
Address,

KANSAS FARMER CO.,
Topeka, Kansas.

The Kansas State Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture and Veterinary Science. Also short courses in Agriculture, Dairying and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES. E. R. NICHOLS,

BOX 50. MANHATTAN, KANS.

Combination Thief-Proof Whip and Walking Stick

The Greatest Novelty of the age. No buggy is complete without one. Price, \$1; postage paid to any part of U. S. Address

E. T. Davis Co., Tippencanoe City, Ohio
Send your orders quick.

AGENTS WANTED Sell \$1 bottle Sarsaparilla for 50c; best seller; 200 per cent profit. Write today for terms. F. E. Greene, 115 Lake St., Chicago

PATENTS.

J. A. ROSEN, PATENT ATTORNEY
415 Kansas Avenue, - Topeka, Kansas.

is so. They help to keep our faith in human nature unshaken and strong. Their homes are as oases in the desert where rest and refreshment are given to whosoever comes to them. They show us what is possible, and are object lessons that help us to solve the problems of social and domestic life. The homes of the people are the foundation of our National life, and only as they are strong and pure can the Nation be so. If there can be one true marriage, there can be many. If one true home can be builded, more can be also. But we must learn to take deep thought of these things, and to teach our sons and daughters that they will not dare nor desire to do else than to wait till "the right one comes and he gits to lubbin you and you gits to lubbin him," before they go from the old homes to the new ones. Marriage must be regarded as a sacrament and the building of a home as the most earnest and beautiful work of life, rather than, as it now seems in so many cases, a little try at living together which, if it isn't all the heated fancy has painted, can be easily ended in the divorce courts. Oh, the wickedness, the pity of this thought! Is it not one great factor in thoughtless marriage? Is it not because of the quick and easy methods of getting a divorce that our people are so careless and unthinking? So it seems to me and I hall every agitation of this question with joy, believing that some day a Moses will be given us who is wise and strong enough to lead us out of this wilderness of wrong into the clear light of truth. May God speed his coming!

COMPATIBILITY IN MARRIED LIFE.

I have spoken of love as a great factor in happy marriage, and so it is—not only great but indispensable, and yet, there must be something else also.

The mother may love a wayward child whose character she can not respect, because she is a mother and can never forget the babe she once held in her arms. She can never believe but that the time will come when her boy or her girl will turn from the evil doing and become again worthy of her love and trust; so she holds to him or her "through good and evil report" and will not let go. Under God, there is nothing that will help more in his redemption, than this clinging, trusting mother-love. He can not get away from it any more than he can get away from the love of God, or his childhood memories. It may be all that keeps alive his faith in the one bright star in his midnight sky. It draws and draws him with restless force that is at once a pledge and a promise of final victory.

But the wife's love is different, though, as the years pass, it takes on more and more of the elements of this brooding mother-love and the old wife loves and forgives much as the mother does, but not the young wife. In the beginning, there must be respect on both sides and a perfect trust one in the other, a trust that knows no wavering or shadow of change; and each must have the qualities upon which this respect and trust may rest and feed, else is the happiness very short-lived and the two either live miserable, contentious lives in the home, or separating, furnish business for the divorce courts, all of which might be avoided had they but waited to really know each other and their needs and abilities.

Young people often mistake a passing fancy or passion for love and, not waiting to know, not taking thought of their own or the other's characteristics, not seeking to discover if the foundations be real, or if they have each that which will command a lasting love and respect, thinking more of the pleasant excitement of the wedding day, the pretty dresses, the presents, and all the ado made over a bride, than of the quiet days to come after all this is over. They rush into wedlock and often almost before the time allotted for the "honeymoon," they have found out their mistake and are sighing for freedom. Oh, the pity that this should be! Better a thousand times a lonely, single life than such an experience as this. Hail to the one who has the courage to walk alone and find her happiness, her work outside of marriage, rather than to satisfy herself with anything less than the best here. Hail and welcome to the "bachelor girl" and the bachelor boy or man, who keep themselves bright and sunny and are a joy and a blessing in many a home where the cares of life press heavily, and who are willing to wait for their soul's mate even until the "mortal has put on immortality" rather than take any other here! For them and for us all life will yet lift "its inner veils of glory" and we shall know that, whether married or single, we each have our part to do in making the whole grand and beautiful.

The Young Folks

The Two Graces.

BY JOHN C. BATED.

Two lovely maids I chance to know,
Their names pray do not ask;
To con their many graces is
My pencil's only task.

A darkening midnight's stormy sky
One maiden's eyes reveal;
The other's rival with their hue,
The bluebells of the field.

Blonde tresses are the beauty's crown,
One wears them on her brow;
The other's wealth of raven locks
Are truest, critics vow.

O! prate not of the sculptor's art,
Fair forms to marble give;
Canst never rival those two maids,
Who breathe, and think, and live.

The music of celestial harps,
Their voices call to mind;
Once heard, their tones within your heart
Forever are enshrined.

To Youth and Age alike they give
Kind words without alloy,
A cup of water, free and pure,
A chalice brimmed with joy.

As on a lonely isle, they stand,
With leaping waves close by,
A sea of wrongs around them surge;
O'erhead, a leaden sky.

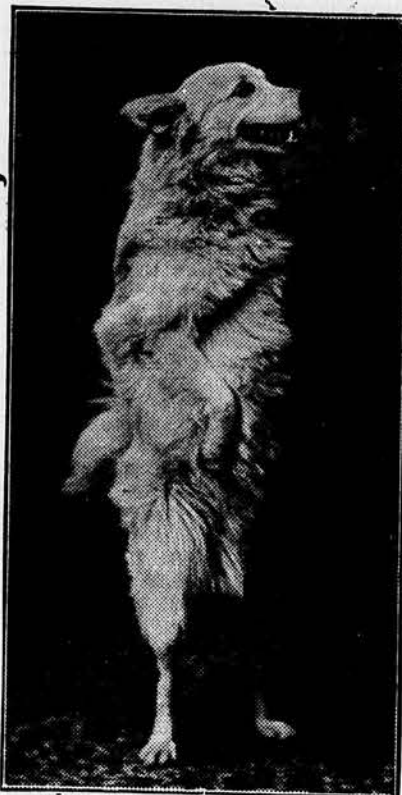
To call his own, let none aspire
Amongst this twain to choose;
The needy world would thus, alas,
A priceless jewel lose.

A dainty form, a glad some heart;
Rich gifts of mind and soul,
The flowery paths of life they tread,
With Heaven for the goal.

An Intelligent Dog.


This dog, about which I am going to tell you, lives in Topeka at the National Hotel. He is a little over a year old and was bought from a little ragged boy who came into the office of the hotel for the purpose of selling him. He is a mixture of collie and spitz and is as beautiful as he is intelligent. He is of medium size and is covered with fine, white, fluffy hair and his fine, brown eyes bespeak his intelligence.

He is not what you would call a trained dog, but seems to observe and



This is Gaston.
(Courtesy of Daily Capital.)

take up things of his own accord. He enjoys riding on the elevator and calls it by going to the shaft and giving a few short barks. He often calls it for his master and mistress. When riding on the elevator, he always stands erect on his hind feet. He is a great favorite in the hotel, but he knows his place and no matter how hungry he is, he knows dogs are not allowed in the dining-room. He is especially fond of the head waiter to whom he looks for his food when his master is not there, and when it is time for his meal, he stands just outside the dining-room door and gives his two or three little barks, as he does when he calls the elevator. He often gets his master's clothes and carries them to his bedside before he rises. He paid his own taxes the other day. He was taken to the office of the city clerk. The money was put into an envelope and given him, with directions to carry it to the man at the desk. He took the envelope in




**SIMPSON
EDDYSTONE
PRINTS**

**Simpson - Eddystone
Silver Greys**

Beautiful. Cheerful. Dignified.
They make dresses whose appearance far surpasses the looks of other materials equal in cost. They wear better, and are good all the year round.

Ask your dealer for
Simpson-Eddystone Silver Greys.
Three generations of Simpsons
have made Simpson Prints.

The Eddystone Mfg Co (Sole Makers) Philadelphia



LOWELL INGRAIN CARPETS

"The all wool kind"

We have been telling you for weeks WHY you ought to insist upon getting a LOWELL INGRAIN the all wool kind—when you buy a carpet. Thousands have taken our advice and are highly pleased.

ISN'T IT TIME FOR YOU TO CONSIDER BUYING

Remember these points: Cover the whole floor—it's warmer, and easier to take care of; can be used on both sides, a great saving. LOWELL INGRAINS are made that way; can be had in newest styles and colors, just like high grade carpets. If it is wound on a hollow stick, it's a genuine LOWELL INGRAIN.

When you buy carpets, ask the local dealer for LOWELL INGRAINS. Look for the hollow stick and run no risk. Don't accept any other.

Manufactured by **BIGELOW CARPET CO.,** New York

his mouth, and walking on his hind feet, took it to the man and pawed at his arm. But as the money had to be paid into the city treasury first, he was taken there where he gave the money to the treasurer, got his receipt, and carried it back to the city clerk and received his tag.

A Wonderful Parrot.

For seventeen years and more William McCrum has sat up on a little bench in a little shop in Howard Street and cobbled shoes.

Before he came to Omaha he was a seaman, and few and remote are the ocean ports on the face of the earth that he has not trod. He can not tell how long it was that he followed the sea, but says it was years and years, ever since he was a lad and stowed himself away in the hold of a four-master bound from Liverpool to Calcutta.

From boyhood to manhood he grew, and then to middle age, before it occurred to him that he would like to see a little of the world other than from the fo'castle of a ship. So he left the life job one day at San Francisco and drifted eastward, until he reached Omaha. Here he cast anchor and here he has since remained.

While on board ship McCrum had learned, as many another Jack Tar has had to learn, to mend his own shoes or go without, so that when his savings were exhausted and it became necessary for him to make a competence, he took to the cobbler's trade.

One day, long before the idea of leaving the deck of his ship had even occurred to him, a dusky belle of one of the Oriental ports where the ship lay at anchor, gave McCrum a gaudy-hued and unsophisticated parrot, and when he took to the land for good the parrot came with him. It came to Omaha when he did, and it has been with him ever since, and will be to the end of the chapter, unless some unforeseen accident happens to break the friendship.

The bird is a wonder, as birds go. Few and far between are the parrots with such brilliant plumage, and its list of accomplishments is, according to its owner, practically unlimited. That it is a wise bird even a cursory acquaintance will prove, and when it does not know or understand what is going on it looks wise and lets it go at that.

This particular parrot's name is not Polly; and it resents being called Polly to such an extent that it will screech in anguish and anger at the appellation. McCrum says that is because the bird hates women, and Polly is a woman's name. So it is, and has been for years, called Willie, and sometimes Bill for short, until now McCrum has but to speak the bird's name to have him sit up at attention.

Willie has a large cage in his master's shop, but the door to it is always ajar, and its occupant is seldom at home during the day. Much of his

LOW ONE-WAY RATES

VIA UNION PACIFIC FROM TOPEKA EVERY DAY

FEBRUARY 15 TO APRIL 7, 1906.

\$25.00 to San Francisco, Los Angeles, San Diego and many other California points.

\$25.00 to Everett, Fairhaven, Whatcom, Vancouver and Victoria.

\$25.00 to Portland, Astoria, Tacoma and Seattle.

\$25.00 to Ashland, Roseburg, Eugene, Albany and Salem, including So. Pac. branch lines in Oregon.

\$22.50 to Spokane and intermediate O. R. & N. points to Wenatchee and intermediate points.

\$20.00 to Butte, Anaconda, Helena, and all intermediate main line points.

\$20.00 to Ogden and Salt Lake City, and intermediate main line points.

For full information inquire of

**F. A. LEWIS, C. T. A., or
J. C. FULTON, DEPOT AGENT**

To the Stockholders of the Farmers' Co-operative Shipping Association...

NOTICE

The Annual Meeting of the stockholders of The Farmers Cooperative Shipping Association will be held in Topeka, Kans., at the National Hotel, on Wednesday, April fourth, at 4:00 o'clock p. m. for the election of a Board of Directors and the transaction of such other business as may legally come before the stockholders' meeting. F. ENGELHARD, President. H. R. SIGNOR, Secretary.

More Money Made as Local Agent

**FOR FARMERS FIVE
YEAR ACCOUNT-BOOKS**

Also Five Year Diaries. Address

Chas. H. Allen Co., Rochester, N. Y.

leisure time he sits perched on his master's shoulder or hat, and offers friendly little suggestions to the man as he pegs away.

At other times Willie makes little exploring trips about the shop, and with the gravity and deliberation characteristic of his kind, inquires into things about which he does not understand.

"Here, come out and stop your growling," said McCrum to the bird the other day, on the occasion of the visit of a reporter to the place. Instantly the ruffled feathers smoothed themselves, and with as near a smile as a parrot can make Willie clambered off his perch and hopped to his master's knee.

"Ain't you ashamed to be so durn grouchy to a stranger?" asked the man.

"Cold day, cold day," said Willie, with a little shake of his handsome feathers, and, as if anxious to change the subject, "Cold day; ha, ha! ten cents, please."

"What are you talkin' about, anyhow?" asked the man. "I b'lieve you're crazy. Now, take that old shoe and pull all those nails out, and hurry up with the work."

Without any further ceremony William took the shoe, and with many a grumble and unintelligible utterance proceeded to pull every nail out with his sharp bill.

"There now; that's something like," said the cobbler, "now you can go and get yourself a peanut or two," and without the slightest hesitation and a little screech of delight, the bird made for a box in the corner and fished out two peanuts, which he consumed with much gravity and apparent satisfaction.

"No," said the owner of the bird, "I am not rich, but there isn't money enough in Omaha to buy that bird. He is the only friend I've got—ain't you, Bill?"

"Ha, ha—pretty cold—ten cents, please," observed William.—Omaha News.

Be Manly.

Not long ago Mrs. Noble Prentiss, who is so well known in the State of Kansas that one does not need to explain who she is, was talking to a company of boys. Those boys were lucky to be able to listen to a talk from such a woman and I wish the boys all over Kansas might know her and listen to her words, but as they can not, I am going to tell you some of the things she said, which is as good for one boy as another. She said:

"I always assume that every boy I talk to is a little gentleman. Always be polite and alive. When you walk lift your feet and hold up your chin. When you can do that you can do anything. No boy who slouches along and drags his feet can ever do anything manly.

"I don't believe there is a boy living who likes a sneak. I want to tell you about a boy I used to know out in Boulder, Colorado. You know I have been interested in boys for a good while. We had a boys' club out there and I became greatly interested in an Irish boy who was about the dirtiest, raggedest boy we had. But I liked him. He was a handsome boy and smart. We had little drills and marches and I one time caught Elgin stepping on the heels of the smaller boy ahead of him to make him jump and cry out.

"I thought some time what would be the best way to keep Elgin from imposing on the smaller boys. You see he wanted to pick a fight every chance he could get. I don't know what it is that makes some boys want to fight, but they do. Finally I went to Elgin and I said, 'I'm going to make you captain of this company. I want you to act like a captain and I want you to see that the bigger boys don't impose on the smaller ones. Will you do that? You should have seen Elgin straighten up. 'You bet I will,' he said and after that Elgin no longer slouched or dragged his feet and became clean and carefully dressed. You see I had appealed to his pride.

"We all do better if people believe in us. If somebody kept telling me I couldn't do a certain thing I'm afraid that after while I wouldn't try.

"Now there is another thing I want to talk to you about and that is cheerfulness. Be cheerful and you'll find you make yourself friends. Try getting up in the morning cheerful. Remember this, nobody ever made friends by being out of humor. And by being cheerful you not only keep yourself happy, but help others to be happy, too."

If we had lost our chief good, other people's good would yet remain, and that is worth trying for.—George Eliot.

The Little Ones

Mud Pies.

The Grown Ups are the queerest folks; they never seem to know That mud pies always have to be made just exactly so. You have to have a nice back yard, a sunny, pleasant day; And then you ask some boys and girls to come around and play.

You mix some mud up in a pail, and stir it with a stick; It mustn't be a bit too thin—and not a bit too thick. And then you make it into pies, and pat 'em with your hand, And bake 'em on a nice flat board, and my! but they are grand! —Carolyn Wells, in St. Nicholas.

A "Truly" Story.

MRS. A. D. GRAY.

"It's been forever and forever muver, since you told me a truly story." My small son drew his chair so close up to mine that I could not move my arm, folded his hands in his lap, and waited.

He felt sure that this hint would be enough. "I wish your mother had two pennies for every 'truly' story she has told the small people in this family," I said.

"But I haven't been here but free years, and the rest have had a heap more time than me. Seems as if you owe me a lot of stories, muver," said Malcolm in an abused voice.

A bright fire blazed on the hearth, and the room was in soft shadow, but for the fire-light. "Firelight stories are the best kind," said Malcolm as he nestled close to my side, "Gwon!"

"Once upon a time a little girl lived on a big, big farm." "All by herself?" asked Malcolm, sitting up very straight. "No, indeed. She had her sister, just a little older than herself, two jolly boy cousins about her own age, a grandfather, grandmother, and a mother—the finest one I ever knew—and cousins and aunts and uncles who came often to visit."

"Must have got pretty tired wif such lots of folks 'round tellin' her how to mind," said Malcolm with a shrug. "Gwon!"

"Well, at that place there was a fine Shepherd dog and the story is about him mostly. His name was Sam.

"At night when it was time to milk the cows, grandfather would say, 'Here, Same, come on. It's time to go for the cows.'

"Sam would stand right in front of him and not stir, only wag his tail very fast.

"Go get them!" grandfather would say.

"The dog always waited for this command, and then off he would dart, all by himself.

"The pasture was a long way from the house; but Sam never failed to bring home the cows. We children used to watch for him to come in sight. There were five or six in the herd, and

presently down the road we would see them coming.

"Sometimes a cow would stop to nibble the blue-grass, which grows wild all along the road sides in Kentucky, and would refuse to go on.

"Then what do you suppose that dog would do?

"He would bark and snap at her heels, and if she would not go on even then, he would jump up and catch her tail in his teeth. You may be sure that would start her on the run. I have seen him many a time, come swinging into the cowlot, tight hold of one of them this way, and the cow on a gallop.

"I never knew any dog but Sam that did this," Malcolm laughed. "Gwon!"

"There was another dog that had some funny ways too, but I never loved him, as I did old Sam. His name was Ponto, and he was given his cup of coffee every morning, 'just like white folks, the colored cook used to say.

"He would not eat the rest of his breakfast, if the coffee was not given him.

"You could call this dog Irish or German or French or anything but Dutch. But if you dared to say, 'you are Dutch, Ponto!' he would show all his teeth in a very ugly way, and growl fiercely at you.

"I once knew another very bright dog too. I loved him better than either of the others. Sometime perhaps I'll tell you about him, and about that big farm and those four truly children. Now it's my boy's bedtime."

"Seems like bedtimes and getting-up times bofe get here when you don't want them the worst," said Malcolm with a sigh.

THE INTERNATIONAL SUNDAY-SCHOOL LESSON.

(Copyright, 1906, by Davis W. Clark.)
Second Quarter. Lesson 1.
Matthew 7:15-29. April 1, 1906.

The Two Foundations.

The conclusion to the Sermon on the Mount is easily recognized as in all respects worthy of the most important composition in human language. It is a solemn, earnest, significant and convincing close. It gathers up, in practical form, the fundamental principles and their consequences, previously enunciated. . . . Creed expresses itself in conduct, faith in works. You can not get Escop grapes from acacia thistles. If conduct be right, creed must be right, and works justify the faith. . . . Knowing the will of God theoretically, and even teaching it to others is not sufficient. In the day of the test it will be all in vain for such persons to affirm that they have prophesied and cast out devils. The substance of religion does not consist in these things. Persons who have only such to their credit must certainly hear that fateful word, "Depart." It will not be the angry expression of personal enmity, but the enunciation of an irreversible decree, a penalty which inflicts itself. . . . The essential in

Food to work on is food to live on.
A man works to live. He must live to work.

He does both better on

Uneeda Biscuit

the soda cracker that contains in the most properly balanced proportions a greater amount of nutriment than any food made from flour.

Uneeda Biscuit

NATIONAL BISCUIT COMPANY

5¢

13 WEEKS FREE

Or 15 Months for Only \$1.00

The Kansas Farmer

The "old reliable" KANSAS FARMER, established in 1863, the best genuine agricultural weekly paper in the West. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

THE KANSAS FARMER CO.,
Topeka, Kansas.

I accept your trial offer to new subscribers to send me the KANSAS FARMER three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write you to stop the paper, and you are to make no charge for the three months' trial.

Name

P. O.

Paint Without Oil

Remarkable Discovery that Cuts Down the Cost of Paint Seventy-Five Per Cent.

A Free Trial Package and a Big Book Telling All About Paints and Paint-Making are Mailed Free to Everybody Who Writes.

A. L. Rice, a prominent manufacturer of Adams N. Y., has discovered a process of making a new kind of paint without the use of oil. He calls it Powderpaint. It comes to you a dry powder and all that is required is cold water to make a paint weatherproof, fireproof and as durable as oil paint. It adheres to any surface, wood, stone or brick, it spreads and looks like oil paint and yet only costs one-fourth as much. For many purposes it is much better than oil paint and is indispensable to every property owner.

Write to Mr. A. L. Rice, 392 North St., Adams, N. Y., and he will send you a free trial of his new discovery, together with color cards and his valuable book on Painting, all free. This book lets you into all the secrets of paint-making, exposes fake paints, tells you what kind of paint to use for different purposes and shows you how you can save and make a good many dollars. Write today and the book and free trial of Paint will be sent you by return mail.

Get Our New Book

Plans for Farm Buildings and Poultry Houses by A. F. Hunter, the well known editor.

Before You Build

It shows how to build with the greatest economy and durability. FREE to you if you mention this paper and enclose a 2c stamp for postage.

F. W. BIRD & SON, (Established 1817)
East Walpole, Mass. Chicago, Ill.

When writing advertisers, please mention this paper.

religion is doing the will of God. Nowhere is the antithesis of profession and life better expressed, "In vain ye call me Master if ye do not the things which I say." Doing Jesus' sayings is not the technical performance of specific acts. It is the being of a certain temper of mind and heart which will on occasion express itself in certain ways and deeds. Do, because one is. . . . It is by this means that the conditions of permanence are met. There is nothing fortuitous about it. No element of chance is here. Obedience to law is obedience to God, for law is the expression of the divine will. Whoever is thus allied to God has His omnipotence pledged for his success. . . . A sincere and persistent purpose in life finds the bed-rock of the divine will, and is not content with anything short of it. It accepts no substitute. Finding the bed-rock, it builds on it. . . . Strength, security, permanence are thus assured. . . . In contrast to this is the careless, haphazard way of building the life structure, the supreme folly of which is apparent. Such act as if they could claim exemption from the operations of universal law. . . . How soon the primitive Christian life was put to the severest possible test. Not in some far-off, mythical judgment day, but in their own time came the testing. The Roman persecution beat and blew upon the church as an organization, and upon believers as individuals. The church stood because rock-founded. So did the individuals, who were similarly grounded.

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Give and Get Good Club, Berryton, Shawnee County (1902).
Women's Literary Club, Osborne, Osborne County (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County, (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chalfso Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literature Club, Ford, Ford County (1903).
Saban Club, Mission Center, Shawnee County Route 2 (1899).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County, (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmer's Institute, Marysville, Marshall County (1902).
Women's Country Club, Anthony, Harper County.
Taka Embroidery Club, Madison, Greenwood County (1902).
The West Side Study Club, Delphos, (1902).
Prentiss Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russell, Kans.
The Sunflower Club, Perry, Jefferson County (1906).
Chaldean Club, Sterling, Rice County (1904).
Jewel Reading Club, Osage County.
The Mutual Helpers, Madison, Kans. (1906).
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

MISCELLANEOUS PROGRAM.

Mother's Day.

- I. The mother's responsibility.
- II. The moral instruction of children.
- III. Children's rights.
- IV. The punishment of children.

I. Every true mother feels instinctively her responsibility to her children. She realizes that it is more than to see that they are comfortably housed, sufficiently fed, and properly clothed. She knows that her responsibility began even before they were born; and her interest never flags while life lasts. Most mothers realize, when it is too late, that their responsibility began when they were forming their own characters and later when they choose the fathers of their children.

II. Too much can not be said as to the moral training of children. Little faults left unnoticed grow into habits; and habits make the character. How soon a child, who has been laughed at for an exaggeration, learns to tell a falsehood! Carelessness of parents, in regard to honesty, often leads a child to become a thief. If a child is allowed to pick up things indiscriminately that do not belong to him, and appropriate them to his own self, it will not be long until he will learn to steal. It requires vigilance continually on the part of the mother if she would have her children from upright characters.

III. This subject of the rights of children is an important one. I have known

mothers to act as if they considered their children their property. They did not consult them in regard to their wishes, and they were not permitted to exercise their own judgment or show their preferences in regard to their belongings. I have known them to give away the children's own things—such as books that had been presented to them—without even consulting the children. Is that just and right? There are many phases of this subject that may be discussed in this paper.

IV. The best way of correcting a child should be discussed in this paper. A wise mother punishes her child not to gratify her anger, but to make him a better child; to teach him that the wrong he has committed must not be repeated; therefore, she will ponder and pray before she acts. The question of corporal punishment may be treated under this subject.

The West Side Study Club.

[I am glad to have the report of the West Side Study club and know of its work. It is not a new club but has not been on the club roll. It is most welcome.]

"The West Side Study Club," four miles west of Delphos, is in its fourth year. The officers for 1906 are: Mrs. Eames, president; Mrs. Emma Clark, vice-president; Mrs. Goodwin, secretary, Mrs. Baldwin, assistant secretary; Mrs. Truix, treasurer. We have a membership of ten, with an average attendance of seven and eight.

Our club motto is, "Whatever you do, do it well."

We meet every third Thursday of each month at 2:30 p. m. Our lessons are taken from the KANSAS FARMER, most always from the miscellaneous programs. Our last lesson was "Present-day Literature." Our next lesson will be "Mission Work in the World." We all like the programs as outlined in the KANSAS FARMER. The topics are assigned to different ones and then we have general discussions.

Last Thursday we met with our vice-president, who has just finished building a beautiful new house. Our husbands went with us, each member taking some part of the dinner. A very enjoyable day was spent.

MRS. GOODWIN.

Mothers and Children.

Mothers wear themselves out and do an injury to their children in not teaching them to help themselves and to be helpful to others. The amount of care that a child requires is very different from that which it may from indulgence demand. If the child were better for it, one would not grudge the time and weariness that the mother or nurse spends, but the child is defrauded in the exercise of those powers which can only develop by being put into use.

It is better for a child to go to sleep by itself than when it is rocked and sung to sleep; but as a general thing mothers prefer the bondage of the process of wooing sleep for their children, and so tie themselves up, and add to their burdens without in the least increasing the comfort of the child.

Mothers would spare themselves greatly if they would only learn that the training of the child begins with the earliest weeks, and that they can make the child understand many things that they would not believe possible.

When the mother is remonstrated with for spoiling the child by overindulgence, she will say, "My child is different from others; she is more nervous. If I do not take her up she will cry and make herself sick."

The child in the beginning, finding that the mother ran to it the minute that it began to cry, of course soon learned this method of summoning her. It also perceived that the louder the cry the greater the indulgence, consequently it develops speedily into a despot, beneath whose tyranny the mother grows wan and pale.

When it is said of her, "She is a perfect slave to her children," she looks satisfied and pleased, as if she had won a martyr's crown, instead of which she has uselessly squandered her strength, and prevented the child from learning proper habits which are as necessary to his growth and development as it is that he should learn to walk instead of creeping the rest of his life, because he may fall and hurt himself, and cry now and then.—Dr. Grace Peckham Murray, in Harper's Bazar.

Here is a dictum right after the heart of the Audubon Society. A scientist says that if the earth were birdless, man could not inhabit it for longer than nine years. All the sprays and poisons in the world would not keep down the insects, which would eat up everything. This fable teaches much regarding women's hats.

TALK
ABOUT
YOUR
HAM

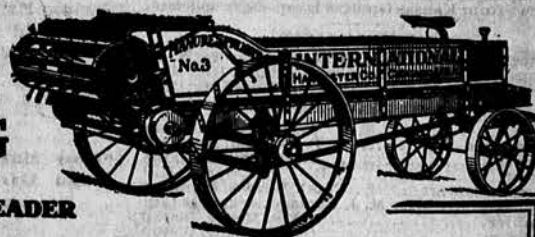
You never tasted meat so sweet and well kept as ham smoked in the new way with Wright's Condensed Smoke. If you have ham, bacon or any kind of meat to cure

WRIGHT'S CONDENSED SMOKE

will cure it perfectly without loss of time or meat. Easy, certain, safe, healthful. Bottle smokes 280 lbs. At druggists 75 cents. Fully guaranteed. Write for "The New Way." Tells ALL about it. The E. H. Wright Co., Ltd., 112 W. 4th St., Kansas City, Missouri

THINGS WORTH KNOWING

If you are going to buy
A MANURE SPREADER



No machine within his reach is capable of doing so much for the farmer as the modern manure spreader.

But then it must be a machine with features—features of economy and efficiency.

The I. H. C. Manure Spreader has such features.

Any man of experience knows that a spreader only works perfectly when the load is level.

The I. H. C. Spreader is the only spreader with a vibrating rake in front of the beater or cylinder which levels every load and any load of manure.

Any man knows that the apron operates better when power is applied at both sides.

The I. H. C. spreader apron is driven at both sides from both hind wheels.

This saves all torsion, binding, friction and undue strain, and consequently saves breakages and results in lighter draft.

One lever is better than many levers in operating any machine.

The I. H. C. spreader is the only spreader which is controlled and operated entirely with one lever.

It has ten different feeds—can be adjusted

instantly while in motion to spread three to thirty loads per acre.

Large, solid, steel axles front and rear—front wheels cut under—turns very short.

Steel wheels—no rotting or drying out. Broad faced tires with turned in flange to keep out dirt, mud, etc. Lightest and strongest.

Provided with traction lugs on rear wheels—will work perfectly on hard, frozen or wet ground.

Made in various sizes to suit all requirements.

The I. H. C. spreader will distribute perfectly manure of all kinds—wet, dry, mixed, straw, full of stalks, frozen, caked, etc.

It may be equipped with special features known as lime and drill attachments for distributing broadcast, or in drills, fine manure, commercial fertilizers, lime, ashes, salt, cotton seed hulls, land plasters, etc.

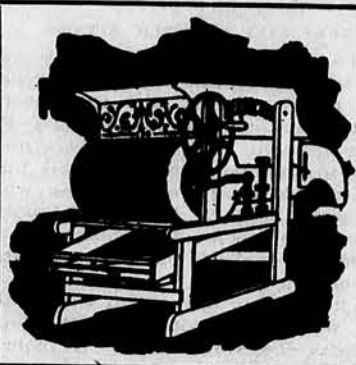
Remember what we have told you—it is the manure spreader with special features which all make for success.

Go to the International Local Agent and look it over, get and read the catalogues or write for further information. It will pay.

International Harvester Company of America,
(Incorporated)
Chicago, Illinois, U. S. A.

Do You Know?

That one handful of noxious weed seed to a bushel of your grain, if planted, will absolutely ruin the crop. There are many cleaners that will remove all but that last handful of the weed seed from your grain, but the "Perfection" is the machine that does the work the way it should be done. Better own the machine that is easy to operate, easy to understand, and yet does its work so perfect that your crops are increased 25 per cent to 50 per cent. :: ::



A "Perfection" cleans, separates and grades anything from Corn to Red-Top.

Write us today and we will tell you what it will do as well as show you how it does it. Be sure and tell us the kind of grain you raise.

THE LEWIS-TUTTLE MFG. CO.

305 C KANSAS AVENUE, TOPEKA, KANSAS.

Good Roads HOW TO GET THEM

SAVE YOUR TIME . SAVE YOUR TEAM . SAVE LABOR . SAVE MONEY

By the use of the Split Log Drag the worst road can be made as good as the best.

A little labor at the right time and in the right places, will work wonders.

FREE LECTURES

By D. WARD KING

Olathe.	March 26	Coffeyville.	April 2
Wellsville.	March 27	Independence.	April 3
Ottawa.	March 28	Chanute.	April 4
Iola.	March 29	Lawrence.	April 5
Girard.	March 30	Emporia.	April 6
Elie.	March 31	Topeka.	April 7

At the close of the meeting Mr. King will demonstrate the workings of his inexpensive device on a nearby road.

IT WON'T COST YOU A CENT

Neither Mr. King nor the Santa Fe, which is defraying the cost of this good-roads educational campaign, wants your money.

The Grange

"For the good of our Order,
our Country and Mankind."

Conducted by George Black, Olathe, Secretary
Kansas State Grange, to whom all correspondence
for this department should be addressed.
News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

Master.....N. J. Bachelder, Concord, N. H.
Lecturer.....Geo. W. F. Gaunt, Mullica Hill, N. J.
Secretary.....C. M. Freeman, Tippacanoe City, Ohio

KANSAS STATE GRANGE.

Master.....E. W. Westgate, Manhattan
Overseer.....A. P. Beardon, McLouth
Lecturer.....Ole Hinner, Olathe
Steward.....R. C. Post, Spring Hill
Assistant Steward.....Frank Wiswell Ochiltree
Chaplain.....Mrs. M. J. Ramage, Arkansas City
Treasurer.....Wm. Henry, Olathe
Secretary.....George Black, Olathe
Gatekeeper.....J. H. Smith, Lone Elm
Ceres.....Mrs. M. L. Allison, Lyndon
Pomona.....Mrs. S. M. Pinnney, McLouth
Flora.....Mrs. S. J. Lovett, Larned
L. A. S.....Mrs. Lola Radcliffe, Overbrook

EXECUTIVE COMMITTEE.

O. F. Whitney, Chairman.....Topeka, Station A
E. W. Westgate.....Manhattan
George Black, Secretary.....Olathe
Henry Rhodes.....Gardner
J. C. Lovett.....Buycrus

STATE ORGANIZER.

W. B. Obryhim.....Overbrook

The Grange in Anderson County.

Editor Grange Department:—I am pleased to announce to the Grange Department of the Kansas Farmer that the grange in Anderson County is in a prosperous condition.

On Saturday, March 10, I organized a new grange at Welda, in this county, with a good membership. E. M. Bentley, of Welda, was chosen master and Mrs. J. M. Richardson, of Welda, secretary. This grange is named Welda and has been numbered by the Secretary of the National Grange, 1446. I have reason to think that it will prove a strong factor in our order.

The grange that I belong to, Equity, No. 1411, at Lone Elm, Anderson County, is doing finely this winter. We have a large attendance at our meetings and all seem to be interested and are lending a helping hand to make each meeting interesting and profitable.

At our next meeting we will receive by initiation twenty new members whom we have reason to think are not after loaves and fishes, but for the purpose of making of themselves better men and women and assisting their neighbors in doing the same.

I am informed that Diamond Grange, No. 5, located at Haskell, this county, is building a new grange hall and is increasing in membership. We feel proud of our order in Anderson County. Let us hear from other grange counties in Kansas through the Kansas Farmer.

J. H. SMITH,
Deputy for Anderson County.

Manhattan Grange No. 748.

Editor Grange Department:—I send you another paper for publication read before our grange at a previous meeting, on the subject, "How May We Enhance the Comforts and Attractions of Our Homes and Strengthen Our Attachment to Our Pursuits."

At our last meeting we received nine new members and reinstated two, which makes an addition of eleven to our membership.

At our next meeting we are anticipating a very pleasant and profitable session. Professor TenEyck, of the Agricultural College, is expected to be present and deliver an address. There are others billed for this occasion whose names I am not able to furnish at present.

All our members express themselves as highly pleased to see the grange page in the Kansas Farmer filling up with various items of interest to patrons.

Let us hear from every grange in Kansas.

A. MUNGER.

Spring Hill Grange No. 279.

Spring Hill Grange held its first farmers' institute recently. It was a success and resulted in a permanent organization. Professor Miller, from the Kansas State Agricultural College, delivered an address in the afternoon on "Seed-Corn." At the evening session a literary program was combined with the lectures.

Our grange is in a flourishing condition and the last meeting proved to be very interesting. Several members of Glendale Grange, No. 1433, in Miami County, were received on dimit, as this grange had surrendered its charter, many of its members having sold out and moved away.

At this meetings the topics of "Good Roads" and the "Use of Incubators" were thoroughly discussed. Several of our farmers are dragging their roads, and

some are experimenting with natural gas as a heat-producer for their incubators.

Our grange has also organized a fair association. It has leased six acres of land for five years and is arranging to hold a three-days fair each year. This action is the outgrowth of a very successful one-day fair, held in Spring Hill last fall under the auspices of Spring Hill Grange.

"Should the farmers lease their land to gas and oil companies?" will be the topic for discussion by the younger members at the next grange meeting.

STREETER BLAIR.

"How May We Enhance the Comforts and Attractions of Our Homes and Strengthen Our Attachment to Our Pursuits?"

A. MUNGER, BEFORE MANHATTAN GRANGE, NO. 748.

Comforts and attractions are comparative and largely matters of taste. This is an age of comfort as compared with past times. This is a country of comforts as compared with many other countries of to-day, yet like Oliver Twist, we pass our plates and ask for more. This is the disposition that brings improvement; this has made us what we are. How shall we direct the force that the good work may continue?

First I would say, keep thinking. Try to realize fully what we want or need. Do not act on the first impulse. Study well a plan of life and give it consistent outlines. Have a high ideal and work towards its attainment. Leave out vices great and small, expensive or inexpensive. When we see a chance to mend our methods, stop a waste, or add some needed improvement, be quick to act.

Surround home with what each considers most desirable. What these shall be it is needless to enumerate, for what is indispensable to one may be useless to another.

All can appreciate a house supplied with modern conveniences, with books upon the shelves and pictures on the wall, filled with a family whose principles and morals are worthy of imitation. A farm, neat and well-kept, whether it be an acre or a township; farm buildings orderly and well planned, suited to their intended uses—with this for a foundation, well-directed work will bring the rest.

Here I might stop—but a few details—set out fruit, plant good seed, do good farming or housekeeping, as the case may be. Take good care of stock. These all help to strengthen our attachment. We all like a nice horse better than a poor one—a nice farm better than an ill-kept one.

TAKE PART IN PUBLIC AFFAIRS.

Take a part in matters of public welfare such as good schools, good roads, good public officers and their work. Plant a garden and do not let the weeds take it. The garden is a good place to combine forces and all take part in raising as well as using what will grow there. A few dollars' worth of suitable seed, well planted and tended, will make it the most profitable spot on the farm.

Do not loaf in town or at the neighbors' while your wife slops the hogs or chops the stove wood. Of course you are solicitous for her welfare and know that fresh air and physical culture are just the thing, but do not neglect your own health just to give her a chance.

DON'T USE TOBACCO.

Did any one ever estimate the amount of health, money, and personal cleanliness that is sacrificed by the people of this country that they might use tobacco? If these were all taken into serious consideration by people generally, tobacco factories would have to shut down. What an amount of real, solid comforts might come at less cost than tobacco!

HAVE A HOBBY.

In your business, have a hobby or be a specialist. Do not neglect everything else but let some one thing predominate.

The premium is on the person who can do one thing well. Modern machinery has changed the world's ways. We can not afford to do without machinery, yet it is expensive. Therefore, decide on what you are going to do; get the needed machinery to do it with; then do all you can with that machinery. Do not get a dozen kinds and only use each a little. That is the rock which has cost many a wreck on this beautiful, billowy prairie-land where sailing is so easy and wrecks so disheartening. I have seen more than a car load of half-worn machinery, representing thousands of hard-earned dollars, neglected and



I CURED MY RUPTURE

I Will Show You How To Cure Yours
FREE.

I was helpless and bed-ridden for years from a double rupture. No truss could hold. Doctors said I would die if not operated on. I fooled them all and cured myself by a simple discovery. I will send the cure free by mail if you write for it. It cured me and has since cured thousands. It will cure you. Write to-day. Capt. W. A. Collings, Box 109 Watertown, N. Y.

rusting around a single Kansas farm-yard. Do not do that. It does not enhance comforts nor strengthen our attachments to anything except the sheriff. Do not buy of agents unless you want to pay their salaries, hotel bills, and livery hire. These are paid by those who buy of them and they come high. Just one case to illustrate: An agent had a "special bargain" in an extra kind of small fruit, one dozen plants for \$1.50. It happened an order had been sent only a few days before to a nursery. Among other things ordered were one dozen of these same plants for 50 cents regular catalogue price.

SHELTER.

Another thing I have seen is women going to milk with no visible wind-break between them and the Arctic Circle except three strands of barbed wire with mud and manure deep enough to swamp anything except rubber boots or a woman's courage. That is not good animal husbandry. If your wife is not worth a stable, your cows are. I will say for the credit of Kansas that such gallantry is not common here, possibly because Kansas women know their rights and occasionally exercise them; possibly because they realize from the start that they have a man to support and build accordingly. One way to add comforts is to good naturedly take the world as we find it and work to make it better.

MONEY-GETTING.

Prosperity tends to increase comforts, therefore strive to prosper, remembering if you would prosper be not in too great haste to get rich, for mere money-getting adds few comforts and often many miseries. It is the judicious use of money, not its possession nor abuse that does good. The fire that warms us may also destroy us if we lose control of it. We need to be diligent and thoughtful. Add a convenience here, an attraction there, whether it be to straighten a crooked fence or set a new shade-tree in the yard. The greatest comforts are not necessarily those that cost the most money, often quite the opposite. Money well-used brings many of them; so does well-directed work. The gradual improvement of a place gives the greatest amount of satisfaction, anticipation before realization. We often get as much satisfaction out of planning a thing as out of the thing itself. Do what we can to-day and plan for the future. Set out trees for fruit and shade. These will grow while we rest or do other things. So we get Nature to work for us if we will only give her a chance.

WHAT KIND OF STOCK.

Keep the kind of stock you like best to work with. Anything is profitable in the hands of some, from a swarm of bees on a town lot to Percheron horses and Hereford cattle on the ranches of the West. Then choose what you like and go at it cheerfully, thoughtfully, perseveringly. Keep a clear conscience, a sound digestion, and the balance on the right side of the bank account. Read good books and papers, a few farm papers, perhaps one is better than a dozen, as "enough is better than a feast."

TOO MUCH NOT DESIRABLE.

But some one says this is advice to beginners, we know all that; what we want to know is how to increase comforts and attractions of our homes. Alas for the child with too many toys, for the old folks with too much of this world's goods to be comfortable. It runs them to death to take care of them. But for those of us more happily situated, who yet may obey the divine command to earn our bread by the sweat of our brows, something still remains to do. Make house or barn more convenient or farm or orchard more productive. Raise potatoes instead of so much corn, alfalfa instead of prairie-grass. Prairie-grass is good, but where alfalfa will grow why be content with one crop a year when three or four better crops might be produced in the same time on the same land.

Remember the adage "We are never

doing well enough when we might do better." This applies to habits of life as well as to meadow land. Cultivate better the acres we have instead of trying to buy all that joins us. When we can double the crops on what we have is a good time to buy the balance.

HE DIDN'T SELL THE FARM.

A young man once set out an orchard to make the farm sell, as it did not pay and he was going to quit. In a few years and before he found a buyer, the orchard began bearing and made such a nice farm and paying investment, that it was withdrawn from the market and he remained there to old age.

SEE, HEAR AND KNOW.

Do not be too sure we know the best way—that closes the door to improvement. Go from home and go with your eyes open. See how the other people live. There is inspiration in seeing, hearing, and knowing how others do things. Make their best ideas your own and make use of them at home. Eliminate the other sort from your place and yourself.

THE MODERN WAY.

But "how may we strengthen our attachment to our pursuit," is well to ask but who shall answer? Modern machinery with horses, steam and gasoline to furnish motive power, now does most of the work on the farm while we ride along on a spring-seat to see it done; but with this immunity from the most wearing part of farmwork, the old man is going to town and the boys are learning trades or professions until the demand is still for wider implements that fewer hands may sweep over more acres as the procession of humanity moves toward the cities. The census shows that in many places there is an increase of population, but an actual loss of numbers on the farms. It is the old story of the goose that laid the golden egg. When she has brought her owner more than the first early dreams dared picture, her cackle becomes so annoying that her head must come off, and too often like the old woman of the legend, when the goose is killed, enjoyment vanishes.

PITY THE RETIRED FARMER.

The life of a retired farmer on a town lot is not always unalloyed bliss, and the starting of a young man in a city is not without its vicissitudes. Sometimes "tis better to endure the ills we have, than fly to others that we know not of." One way to strengthen then our attachments to our pursuits would be to take a retrospective view and see how our fathers and grandfathers chopped the forests, plowed among stumps, split rails for fence—while we now unroll barbed wire by the mile—cut wheat with a cradle or a sickle, raked and bound it by hand, thrashed it with a flail, and took the crop to mill in a sack before them on a horse. And see how our mothers and grandmothers pulled the flax, spread it out to "rot," broke it, hackled it, spun and wove it, all by hand, and then sewed it into the various articles of household use, also by hand. Compare these methods with those in common use to-day. What a change! But if we try to prove that all this has strengthened attachment to our pursuits, we must confess defeat—the child with a hundred toys wants a thousand more, while he with only one, dares wish for just one more. Children's toys are their tools; grown people's tools are their toys; and the one is about as easily satisfied as the other.

EFFECTS OF AMBITION.

Another influence, difficult to reach, which affects comforts of homes and homes themselves is in our rush and exultation at the thought of what a fine country we live in and how much of the world we can absorb. Are we forgetting that those who tolled a month to accomplish what we want to do in a day, were laying the foundations for this Government? Do we realize that with the same lightning speed with which we want to do everything else, we can run this country to ruin instead of to glory? Do we need the earth? The "Circles in the water" spread until they come to naught.

How many times have the widening circles of empire weakened the strength of the center? And what of those in public office? Is the welfare of the people considered when a man is put in office? Or is it because he is a safe tool to defeat just legislation and make a farce of existing laws?

THE KIND OF LIFE TO LIVE.

Rational, wholesome self-denial, honesty in public and in private life would preserve to posterity some of the comforts we already enjoy. If the machinery of government is clogged with bribes, boodles, and corruption, our descendants will some day experience the hardships of past generations. Unblushing avarice needs to be replaced by right and justice.

High and low, rich and poor alike, need to know that every law of this land applies to them, just as it applies to every other person, and that it will be enforced with equal justice and certainty.

Internal-Trade Movements for February.

Internal-trade movements for February and a two-month period show in the aggregate marked gains over corresponding activities in either of the two immediately preceding years, according to reports received by the Department of Commerce and Labor, through its Bureau of Statistics.

GRAIN.

Total receipts of grain at 15 interior primary markets during February amounted to 57,659,238 bushels, compared with 45,411,546 for February, 1905, and 56,943,264 for February, 1904. Of the movement for the second month of the current year, 13,956,108 bushels were wheat, 21,826,530 corn, 14,759,192 oats, 6,412,925 barley, and 704,483 rye. During the first two months of 1906 grain receipts at these cities aggregated 129,761,974 bushels, more than 28 million in excess of the corresponding movement of 1905, and over 8 million greater than that of 1904. Of this total 37,138,878 bushels were received at Chicago, 3,944,587 at Cincinnati, 1,918,316 at Cleveland, 2,688,500 at Detroit, 6,029,829 at Duluth, 1,637,375 at Indianapolis, 10,381,500 at Kansas City, 1,138,000 at Little Rock, 3,770,162 at Louisville, 8,434,260 at Milwaukee, 23,540,300 at Minneapolis, 7,915,700 at Omaha, 5,309,300 at Peoria, 13,556,058 at St. Louis, and 2,309,200 at Toledo. Shipments of grain from these 15 markets during the month of February amounted to 40,550,980 bushels in 1906, 26,645,988 in 1905, and 33,565,297 in 1904. Similar shipments for a two-month period were 88,061,080, 63,041,850, and 69,192,509 bushels, respectively. Of the 1906 total, wheat constituted 12,452,748 bushels; corn, 31,503,782; oats, 35,302,326; barley, 7,469,689; and rye, 1,332,535.

LIVE STOCK.

Aggregate receipts of live stock at the markets of Chicago, Kansas City, Omaha, St. Louis, St. Joseph, and St. Paul during February amounted to 3,101,454 head, against 2,832,848 in February, 1905, and 3,215,998 in February, 1904. During the first two months of the current year similar receipts totaled 6,753,708 head, 432,044 more than during the corresponding period in 1905, and 260,640 in excess of the same months in 1904, and consisted of 1,384,692 cattle, 68,837 calves, 3,566,931 hogs, 1,624,118 sheep, and 109,130 horses and mules. Of the total of all classes, 2,956,860 head were received at Chicago, 1,233,409 at Kansas City, 883,465 at Omaha, 768,222 at St. Louis, 615,164 at St. Joseph, and 296,588 at St. Paul. Compared with the corresponding receipts in 1905, gains were made at all of the markets specified with the exception of St. Paul, where a slight loss occurred.

At Chicago the receipts of packing-house products during February amounted to 68,176,684 pounds in 1906, 59,007,372 in 1905, and 46,274,668 in 1904, while shipments for the same months were 212,267,872, 191,122,270, and 214,898,447 pounds, respectively. Receipts during January and February combined were 142,458,663 pounds, compared with 103,958,671 during the corresponding period in 1905, and 98,629,868 in 1904. Shipments which aggregated 463,255,657 pounds during January and February were 86,886,641 pounds in excess of those for the same months of 1905, and 21,660,287 pounds greater than for 1904.

WHEAT.

Receipts of wheat at the spring-wheat markets of Minneapolis, Milwaukee, Duluth, and Chicago from August 1, 1905, to February 28, 1906, amounted

to 127,929,531 bushels, compared with 114,087,406 received during the corresponding months in 1904-5 and 118,250,850 in 1903-4. Of the present season's movement, 71,801,540 bushels were received at Minneapolis; 5,788,630, at Milwaukee; 32,255,420 at Duluth, and 18,083,941, at Chicago. At the winter-wheat markets of Toledo, St. Louis, Detroit, and Kansas City wheat receipts from July 1, 1905, to February 28, 1906, aggregated 58,041,695 bushels, 8,491,302 greater than the corresponding movement in 1904-5, but 5,961,107 below that for 1903-4. Toledo received 4,410,200 bushels, St. Louis, 18,210,000; Detroit, 1,844,695, and Kansas City, 33,576,800.

The run of petroleum from wells in pipe-line territory during February amounted to 2,761,068.49 barrels and other receipts to 3,088,152.66, while regular deliveries were 3,535,472.77 barrels and other deliveries 2,909,226.56. During February, 1905, similar movements were, runs from wells, 3,280,742.86 barrels; other receipts, 2,698,275.09; regular deliveries, 3,635,613.03, and other deliveries, 2,689,895.46. For the two-month period runs from wells aggregated 5,928,066.90 barrels in 1906, and 7,023,743.99 in 1905; other receipts, 6,957,349.49 in 1906 and 5,764,270.34 in 1905; regular deliveries, 7,387,289.31 in 1906 and 7,663,556.74 in 1905, and other deliveries, 6,338,182.43 in 1906 and 5,670,414.72 in 1905.

The car supply during February was much more satisfactory than for a number of months previous. Very few complaints were received from Middle and Northwestern States, and in these localities the situation was generally indicated as improving rapidly. In the coal regions there was a sharp demand for cars, often in excess of the supply, but in this connection it should be remembered that the recent coal movements have been decidedly abnormal, owing to the threatened labor difficulties. From the South some serious complaints have been received, the scarcity of cars at Charleston, S. C., being reported as worse than ever before, and affecting all classes of freight. Numerous complaints were also received with reference to delays on freight forwarded. At Louisville a pronounced shortage in the supply of cars was reported, affecting all classes of business to a greater or less extent.

The Good Roads Train.

EDITOR KANSAS FARMER:—There is an article in your issue of March 8, upon which I would like to comment. It is

Good Roads

ADD TO YOUR PROPERTY'S VALUE

Good roads bring your farm nearer town. Accessibility in all kinds of weather has a financial value. Farmers and merchants are equally interested in improved means of communication.

D. Ward King

AND OTHER EXPERT ROAD BUILDERS

WILL BE AT

Olathe.	March 26	Coffeyville.	April 2
Wellsville.	March 27	Independence.	April 3
Ottawa.	March 28	Chanute.	April 4
Iola.	March 29	Lawrence.	April 5
Girard.	March 30	Emporia.	April 6
Erie.	March 31	Topeka.	April 7

and tell about the workings of the Split Log Drag.

Free Lecture and Practical Demonstration

Your presence is wanted—not your money. There's nothing to sell; nor will a contribution be asked. Absolutely free. All expenses paid by the Santa Fe, which is conducting this good-roads campaign.

headed "A Santa Fe Good Roads Train." The Santa Fe people are very considerate of us needy farmers, especially since they have the interests of the State of Kansas so much at heart. This is very nice of them, but if they mean to introduce the building of hard roads, or macadamized roads, by us farmers they had better wait until we invite them. The farmers, as a rule, are in favor of good roads, but here in Kansas where we have 10 or 11 months in the year of good earth roads, the best thing we can do is to keep those earth roads in good condition and any lectures on road building looking to that end will be appreciated by the farmers. No doubt the auto people would like to have the farmers build hard roads for them to run their automobiles on. I do hope, however, that our enterprising people along with our legislators will guard against foisting any such ruinous scheme on the farmers as the building of hard roads, meaning rock macadamized or cement roads. I have kept an eye on this agitation going through the agricultural papers of

the country for some time, and some of it is very ill advised. J. M. ENGLE, Dickinson County.

[The principal speaker on the good-roads train will be the inventor of the King road drag, an inexpensive implement by the use of which dirt roads are kept from becoming bad. The Santa Fe is to be commended for bringing before the people of the territory it traverses, practicable methods of maintaining good roads cheaply.—EDITOR.]

It is a good thing for the farmer to always aim to do the best work and to have the best in everything instead of aiming to do the most and have the least and that of poor quality, as is often the case.

The Chinese use envelopes with red lines on them and a heavy red band down the center. A traveler who has been in China investigated the reason for this. It is simple. Chinese mourning being white, it is regarded as an unlucky color for an envelope. Red is a lucky color. Hence the red bars and lines.



A Special Factory for a Special Buggy.

Did you ever see an IDEA grow into an immense FACTORY? Well, here's a picture of the factory—and the story of how it grew from one man's idea.

This new factory was built and equipped by The Ohio Carriage Mfg. Co., of Cincinnati, and it is devoted exclusively to the manufacture of their famous Split Hickory Special Top Buggy.

It is the only carriage factory in the world making one distinctive and exclusive style of buggy.

Some others claim to be manufacturers by showing pictures of a big factory, but forget to state just where their factory is located principally because it doesn't exist. Our factories are located right here in Cincinnati at 1992 to 2000 Plum St., and 247 to 253 Stark St., and are open to inspection by you at your friends at all times. It's the only one in Cincinnati and one of only two in the State of Ohio selling their product direct to the consumer.

This is a new plan—this building of one special factory for one special buggy.

The Company started out to make the Split Hickory Special their leader, the best buggy in the world and they have succeeded in placing it far in the lead of all other buggies.

The factory has 75,000 square feet of floor space. Think of it—seventy-five thousand square feet of factory space given over exclusively to the making of one kind of vehicle!

Before this new factory was built, the Company devoted a part of their general factory to the manufacture of the Split Hickory Special, and were able to make a better buggy than any one else at the price.

But now, with an enormous special factory, having acres of floor space, and more skilled carriage builders than ever before, they are bound to surpass their former record.

On the new plan, the Ohio Carriage Mfg. Co. manufacture at a minimum of cost, using the finest grade of material it is possible to get, and the highest

skilled workmanship. Every man is an expert on making this one special buggy. Every piece of machinery in the factory is made for this particular work. Every piece of material is purchased for this especial make and style of buggy.

With these trained men—with this special material—and with these special facilities, the Ohio Carriage Manufacturing Co., in this Special Split Hickory Buggy at \$50, turn out a vehicle that would cost \$75 anywhere else. They sell the \$50 Split Hickory Special on their 30 Days Free Trial Plan and guarantee every vehicle for two years from the time it leaves the factory.

In spite of the general advance in cost of all raw materials, and the higher prices paid their skilled workmen, they don't charge a cent more for the "Special" this year than they did last.

Our readers can get a copy of the company's handsome 1906 catalogue by sending a postal to H. C. Phelps, president of the Ohio Carriage Mfg. Co. His address is Station 251, Cincinnati, O.

FREE Flower Seeds 1000 sorts, new and old, for a big bed; also Park's New Floral Guide FREE. Tell your friends. Geo. W. Park, LaPark, Pa.

STARK best by Test—75 YEARS. We **PAY CASH** WANT MORE SALESMEN **Weekly** Stark Nursery, Louisville, Mo.; Nashville, Ala.

FRUITFUL TREES MILLIONS OF FRUIT Small Fruits and Evergreens. Russian Mulberry and Black Locust, \$1.00 per 100. Carefully dug and packed. Freight prepaid on \$10.00 orders. Catalogue free. Fine trees guaranteed. Gage County Nurseries, Box 500, Beatrice, Neb.

SEEDS That will grow **PLANTS** That will bloom. New better, even at the high prices. Special bargains BREDS, 10 pkts. Annual Flowers, 100 pkts. Vegetables, 100 pkts. PLANTS, 5 Root, 500. Geraniums, 250; 6 Begonias, 250; 4 Pansies, 250. My catalog prices will surprise you. Catalog and packet Royal Giant Pansies free. A. C. Anderson, Columbus, Nebraska.

ROSES & SEEDS FREE 50¢ WORTH Free rose bush, due bill for 50¢ worth of free seeds, and a free packet of seed will be sent to all sending for our handsome new catalog. Send 10¢ to pay postage. A. A. BERRY SEED CO., BOX 37, CLARINDA, IOWA

SEED CORN Boone County White, Farmers' Interest, Reid's Yellow Dent, Improved Leaming and Riley's Favorite, best pedigree and tested seed, grown on my own farms, \$1.50 per bu. Seeds free. Delivered on car for any station in the United States.

J. C. ANDRAS, Jr.
Manchester, - - - Illinois

Iowa Produces the Best
SEED CORN
and Southwestern Iowa produces the best seed corn in the State. Every grain from which our seed is grown is carefully selected by us, and the cultivation of the crop is carried on by a member of our firm. We raise every grain of seed corn we sell, and we make it as perfect as it can be made. Write us for prices. W. W. VANSANT & SONS, Box 54, - - - Farragut, Iowa

GINSENG is a money-making crop. Room in your garden to grow hundreds of dollars worth annually. Thrives throughout the United States and Canada. We sell roots and seed during spring and fall planting seasons and buy the dried product. You can get started in this profitable business for a small outlay. Send to stamp to-day for illustrated literature telling all about it.

THE ST. LOUIS GINSENG CO.
St. Louis, Mo

Most Extensive Grower of
Grape Vines

In America.
Intro- (CAMPBELL'S EARLY, - The Best Grape
duce- JOSSELYN, - - - The Best Gooseberry
of (FAV, - - - - - The Best Currant
Small Fruits. Catalogue Free.
GEO. S. JOSSELYN, Fredonia, N. Y.

The World's Fair Prize Winning Corn
Just WON FIRST PRIZE at the Corn Breeders State Show at Manhattan, also first on Farmers Int. White and second on Boone Co. White. Sample and catalog tells how to raise Corn every year FREE. John D. Ziller, Hiawatha, Kansas.
HE RAISES CORN.

GOLDEN YELLOW CALLA LILY, 5 Bulbs.
50 KINDS 10¢
SEEDS
Asters, Balsam, Carna, Calliope, Nasturtium, Morning Glory, Pansy, Larkspur, Jobe Tears, Poppy, Golden Glow, Snapdragons, Cosmos, Pink, Zinnia, Verbena, Monkey Plant, Sweet Rocket, Primrose, Ice Plant, Petunia, Castor Oil Beans, Portulaca, Candytuft, Sweet Pea.
5 CHAMPION BULBS.
The Summer Tycoon, Golden Lily, Humming Bird, Gladiolus, Giant Tuberosa, Baby Breath, Oxalis, all this beautiful collection of seeds and bulbs only 10¢ in silver or 5¢ in stamps to pay the cost for packing and postage. Order quick and be sure of this grand offer—only 10¢ cents.
CHARLESTOWN NURSERY, - CHARLESTOWN, MASS.

20 HARDY PLANTS \$5.00
Shrubs and Running Vines
1 Spring (Lilac)
1 Japan Snowball
1 Double Althea
1 Double Flower Almond
1 Hardy Hydrangea, 4 ft.
1 Spring Mock Orange
1 Rhoe Purple Fringe
1 Forsythia Beautiful
1 Lilac, white and purple
1 Deutzia
1 Bridal Veil
1 Rhododendron
1 Azalea Mollie
1 Weigela
1 Rose of Sharon
1 Running Vines
1 Japan Honeyuckle
1 White Star Clematis
1 Dutchman Pipe
1 Ampelopsis
1 Boston Ivy
20 Hardy Plants from 4 to 5 ft. tall. This entire collection, only \$5.00. Send your order early and we will send this fine collection worth twenty-five dollars in great plants to beautify your home, for only \$5.00. It is a great bargain. Order quick and be sure of them.
NATIONAL PLANT CO., Somerville, Mass.

Horticulture

The Home Orchard.

GEORGE WEST MAFFET LAWRENCE, BEFORE THE FARMER'S INSTITUTE, FRIDAY, FEBRUARY, 16.

The fruit-grower makes a severe distinction between planting for commercial purposes and for home use. We must have quantity even at the sacrifice of quality if we become a factor in the market; we must pay strict attention to the ability of the fruit to stand handling, packing, and shipping, and to the holding-up and long-keeping qualities. With home consumption none of these things need be considered, and choice quality and a succession throughout the season are the most important considerations. I shall confine myself to my own experience right here in the suburbs of Lawrence, with a black, waxy soil, with a blue-clay subsoil of a depth varying from 16 to 30 inches; land that should be tile-drained but is not; land where the natural roadside grass is Kentucky blue-grass and where white clover springs spontaneously and is an abomination; a locality where the encroachment of forest-trees is only kept down with the axe and the grubbing hoe; where thousands of elm and maple seedlings root by the roadsides—and all this in Kansas! Let not the Western Kansas farmer whose soil and climate conditions are so vastly different, be deceived by my fruit recommendations as to varieties.

I am talking for the benefit of the farmer who, from the lack of time to care for it, does not plant fruit; who thinks he can buy fruit for his family cheaper than he can raise it, and whose family does without it because the inconvenient dollar is not in reach at the convenient time. I wish to get under the hide of the man who can not afford to indulge his family with fruit, but must face a heavy doctor's bill every year or two because of a not sufficiently varied diet in his family. I desire to reach the ear of the father who knows nothing of the medicinal effect of the various fruits and vegetables. I hope to attract the attention of the parent whose son craves something he knows not what, but has started to tamper with strong drink. I speak for the family of unthrifty children, always unhappy and dissatisfied at home, and longing for a change of scene.

What can add more to the attractiveness of a farm-home than a plentiful and varied fruit supply? What will always bring back to your children pleasurable memories of that home in all their after life? What will better attract boy chums and girl friends and popularize the home more than the charm of gathering direct from the trees, plants, and vines, the luscious, well-ripened fruit, theirs for the asking through an unfeeling cordiality?

Can you raise \$50 to spend this spring for choice fruit? If not, can you squeeze \$25? If so, go at once to your home nursemens and give your order. Explain that you want your order true to name and can not allow substitutions. That which is missing, let your nursemens order abroad. If you can afford it, let them add varieties, but do not let them strike anything from the following lists. Order two trees of each kind, so if one fails the other will still be left.

ECONOMY IN SPACE.

Where will you find room? The apple-trees must have plenty of room, 30 feet apart. The plums will do best in the dooryard or in the chicken-yard where the earth is tramped. Several peach-trees can be put along the kitchen walk and one or two in the shelter south of protecting buildings—these latter will bear in "peaches-are-killed" years. The cherries can go along the fence-row or beside the front walk or down the driveway. A pear-tree will do well close to and north of the house, other pears will take but little room scattered here and there. The grapes can go upon an arbor over the kitchen walk or be fastened against the sunny side of a building; a few bushes of currants and gooseberries will do well on the north (shady) side of a tight board fence. The strawberries, raspberries, and blackberries should be in the kitchen-garden behind chicken-wire fencing. Kindly remember that a horse will go a mile to bark a peach-tree and he is very fond of plum foliage; a cow can thrash to ribbons a small tree or bush with her horns and a 400-pound hog can bear down and snap off a tree trunk three inches through, or work over and gnaw all the surface-

roots of any large fruit-tree. This has cost me quite a number of dollars to learn.

VARIETIES OF APPLES.

And now for the varieties from actual experience at "Elkhorn Fruiterie." Of the apples, the earliest of all for eating and apple-sauce is the Red Astrachan. Next follows the Strawberry-apple, a handsomely striped sheep-nose of choice quality, each perfect specimen a poem in itself, and lasting through a long season because of the habit of the tree to ripen only a few specimens at a time, and further it bears each and every year. Then comes the Maiden's Blush, a flat, yellow apple with red cheek, a superior cooking-apple, but easily blemished with insects; and at the same times comes the little, round Red June. Next in importance is the Pennsylvania Red-streak, a very large apple of highest dessert quality, that ripens a few at a time and keeps well in the cellar until Christmas. It has borne eleven crops in twelve years with us. Where room will allow on a town lot, the two varieties, Strawberry-apple and Pennsylvania Red-streak, will furnish a succession from early to late and they can take the place of shade-trees. Next in the list we place Summer Rambo and if space will permit a very superior white apple is Cooper's Early White. The Dominie is a fine eating- and cooking-apple, but it has the fault of rotting on the tree and shedding too freely. When we come to late fall and winter apples, the Winesap outranks them all for quality; the Genton (Jeniton) keeps longest of them all its crisp sprightliness of flesh, although it runs small because of over-bearing and will crack badly if heavy, late rains ensue, and it suffers some from a blister rot; the Jonathan is a superior dessert apple that brings the highest price—its weak point is that it sheds to the ground prematurely and will have to be picked before the rest; the Missouri Pippin is early to come into bearing, it is small and a long keeper; the Ben Davis outranks the entire lot as a pie apple; it is choice for use in jelly, applesauce and "liquid apple-jelly" (a product halfway between maple-syrup and strained honey). By all means add the Rome Beauty to the list. Two apples not on my list but should be on yours, are the Grimes' Golden and York Imperial. We are all going to plant this year a mammoth apple that is attracting attention—the Wolf River.

HOW TO PICK.

And now that we have the apples, we must have a picking-stick with which to reach to the top of the highest trees and take the perfectly ripened specimens as they mature. Have two poles for handles, one twelve feet and the other sixteen; take an oaken block one inch thick and 3½ square; bore a three-quarter hole in the center to fit the handles; then a series of holes to fit number-nine wire, in as large a circle as the block will allow; take pieces of wire about ten inches long and force each end up through the holes in block and staple to place. When completed the picker should resemble the human hand with all the fingers held touching at points. The wires should be pulled apart or pressed together to suit the size of the fruit it is about to be slipped over.

PEACHES.

Now as to peaches, remember you can not expect over four crops in ten years, but you will get some peaches the second year from planting. My list would be Early Rivers, Early Crawford, Elberta, Stump the World, Crosby, and Crawford Late. Ask the nurseryman to add two or three more in the succession and add a couple of large clings.

PEARS.

After a desperate and losing fight with pear blight, I have fallen back to the Bartlett, which is the finest of them all in quality, and after being cut to pieces in cutting out the blight will put out again and last a long time before succumbing finally; try also the Duchess and the Keiffer. The Anjou is a very fine pear. Set these in the sod on the lawn and in the best drained place you can find.

So long as we had the Wild Goose and Minor plums on the place we had a yearly supply; try these two and ask the nurseryman to recommend several Japan plums.

CHERRIES—SMALL FRUITS.

On the cherry list are the successful three: Early Richmond, English Morello and Montmorency. The cherry is a short-lived tree and will soon play out if any large limbs are injured or broken. As they give way, be sure to make the loss good by planting others.

Try a couple of Mulberry-trees and

HEALTHY TREES Brought in quality. Grafted Apples, 40; Budded Cherries, 150 each; good varieties. Concord Grapes, 25 per 100; Black Locust and Rose Mulberry, 25 per 100. We pay freight. Complete catalog free. Salisbury Nurseries, Box 22, Fairbury, Neb.

READER IF YOU HAVE NO BERRY PATCH and desire one, my 1906 catalogue may tell you how to start it. 50 varieties plants low priced.
B. F. SMITH, Drawer C, Lawrence, Kans.

Trees, Plants & Seeds THAT GROW Best quality. Good bearing. Low prices. Apple, 40; Plum and Cherry, 50; Peach for all Budded; Concord Grapes, 25; Forest Tree Seed, 1000. **GERMAN NURSERIES** Carl Sonderberger, Prop. Tested seeds. Very cheap. Freight paid on trees. Catalogue, English or German, free. Write for it today. Address **GERMAN NURSERIES** Box 9 Beatrice, Neb.

WRAGG TREES WE PAY FREIGHT. SEND for our handsome catalog of Trees, Shrubs, Roses, Evergreens, Etc. We deal Direct. Our prices are lowest. **M. J. WRAGG NURSERY COMPANY,** 307 Good Block, DES MOINES, IOWA.

World's Premium Seed Corn, HOWARD COUNTY WHITE

Awarded first and third premium at State Corn Show in St. Louis 1904, and gold medal at World's Fair in 1904. Has won all premiums wherever shown for the past six years. Hand nubbed and graded, making all grains uniform in size. For particulars address,

E. T. LONG, Fayette, Missouri.

50 BULBS 25 Cents. Will grow in the house or out of doors. Hyacinths, Tulips, Gladioli, Crocus, Fuchsias, Oxalis, Tuberosa, Begonia, Jonquilla, Daffodils, Chinese Lily, Dewey Lily, Gloriosa, Lilies of the Valley—all postpaid, etc. in stamps or coin. Ask premium with these Bulbs we will send FREE a big collection of flower seeds—over 200 kinds. **HILLSIDE NURSERY, SOMERVILLE, MASS.**

OUR CATALOGUES opens with a triumphant arch made up of over 40 varieties of vegetables the world has learned to value, and of which we were the original introducers. It has some both new and good for this season, and a vast variety of standard vegetable and flower seed, with intelligent instructions for the cultivating of all of them. Catalogue FREE. **J. J. H. GREGORY & SON** Marblehead, Mass.

GREGORY'S SEED CATALOGUE FOR 1906

High-Grade Flower Seeds. 20 Packages 10¢ FOR

KINDS. Bat. Button, 10-Weeks Stock, Eschscholtzia, Sweet Alyssum, Sweet William, 10. **KINDS.** Poppy, 10; Candytuft, 10; Aster, 10; Zinnia, 10; Larkspur, 10; Nasturtium, 10; Sweet Mignonette, 10. **KINDS.** 10 Portulaca, 20; 10 Marigold, 10; 10 Pansy, 10; 10 Sweet Pea, 10; 10 Pink, 10; 10 Balaam, 10; 10 Larkspur, 10; 10 Nasturtium, 10; 10 Calliope, 10; 10 Sweet Mignonette, 10. All of the above sent to any address, post-paid, for 10¢ silver or six two-cent stamps. As a premium and to introduce our seeds into every household, we will also send a collection of fine beautiful bulbs FREE with Catalogue. **Somerville Nursery, SOMERVILLE, - MASS.**

SEED CORN There are many points to be considered in selecting seed corn; some of the most important are outlined in the above cuts; namely, well filled out at butt and with small to medium sized shank; the tip of ear well capped or covered over with fair sized grains; the kernels should be wedge shaped from cap to where it rounds off at point or germ end, and the rows should be close together but still not so tight as to smother the germ and cause mould. The grain must be deep and set on a small cob which is of such texture that it will dry out easily and quickly. These points are all brought the nearest to perfection in the new **GOLDEN WEST** It is the most desirable, large, bright yellow corn ever sent out and it will pay you well to try it. Ask for copy of our large catalogue, illustrating and describing the above and many other varieties of seed corn, oats, wheat and all kinds of farm and garden seeds. Mailed free if you mention this paper. **IOWA SEED CO., DES MOINES, IA.**



STEVENS FIRE ARMS

Accuracy is not more chance any more than the high scores of a crack shot.

The accuracy of the Stevens barrel is the result of best material, best workmanship and careful testing at every point.

Our Catalogue of Firearms will interest you. 140 pages, describing different styles, how to select a rifle, how to care for a rifle, talks on ammunition, and much other valuable information. Send 4 cents in stamps to cover postage, and we will send it free. If your dealer cannot supply you, write to us.

J. Stevens Arms & Tool Co.
125 High Street
Chicopee Falls, Mass., U. S. A.

a row of dwarf Juneberries, the latter a cultivated huckleberry that always gives a reward. They make a fine bush for the chickens to loaf under.

For grapes, the four standbys are Moore's Early, Worden, Concord and the White Niagara.

If the blossoms have not been removed from the strawberry plants you set this spring, you can get some berries this May from them without serious injury to an extra-early set plant. Try four varieties—the Warfield and the Senator Dunlap for main crop; then the Parker Earle which will give you much pleasure because of the great mass of fruit it staggers up under and lifts free from the ground; then the Clyde, which ripens its fruit lying on the ground, for all the world like a nest of bright-red quail's eggs. Then there is the Parson's Beauty that is showing marked superiority in the hands of our local growers.

The Kansas and the Cumberland will give you all the black raspberries you will need; the Cardinal is a purple cap of great vigor; and for red raspberries the Miller and the Loudoun will complete the list. Remember you will have to severely keep the red raspberries confined to a narrow row if you expect much fruit, as they spring up so from the roots to weaken themselves and prevent fruiting.

I have been patiently waiting for years to get a start of blackberries from our mutual friend, D. G. Watt, who is perfecting a variety of marked superiority which has not yet been introduced. The Kenoyer is a new variety of much merit. The Lucretia Dewberry is much larger than most blackberries and is a running vine with a plenty of awful thorns.

FOR ADORNMENT.

Have you a daughter nearing womanhood? By all means send away and get her some of the rose collections that can be had for from ten to twelve cents per plant from the rose specialists. Two or three dollars will make a great showing and she can revel in roses until snow flies and besides she can propagate plants for the whole township. Besides the hardy roses of every color and shade, there are the monthly roses in endless profusion; the climbers and ramblers and the moss roses. They must have the direct sun to succeed.

If you live upon a city lot, there is no reason why you can not raise some fruit—not a family supply, but for the pleasure of it; a few plants of pleurant, set just anywhere; an asparagus bed three-by-six feet; a strawberry bed set so close as to step on the fruit in gathering. At least have grapes and roses if you have the necessary sunny exposure for them. And put in the shade between two houses a half dozen currant- and gooseberry-bushes. In the recess of the L of the house, if on the north, place a pear; if on the south, a peach. If you can replace a shade-tree with one or two apples as mentioned elsewhere, there will be a chance of gathering the fruit yourself, as only a few ripening at a time is not nearly the temptation as a tree full of bright red fruit. A cherry-tree is much too great a temptation for the small boy. As the red raspberry excels in delicacy of flavor all of the bush fruits, room might be found for a clump or row.

And now if you will persistently replace all trees and plants that fall and care for them until all are in full bearing, you will then find that you have added a cool thousand dollars to the selling price of your property; the word "home" will have a new significance and your family will not only be healthier and happier, but will be all the more industrious, thrifty and energetic.

Shade Trees for the Home.
E. F. STEPHENS, CRETE, NEBRASKA.

A home whether in the country or town should be surrounded with stately shade-trees. They make a background or frame-work for the place. In a cold climate they are a shelter, while in a hot climate they give necessary shade, cutting off the burning rays of the sun from porch, lawn, or walks. They screen the south and west windows from the hot sunlight and make the home more beautiful, more comfortable, and more valuable. To plant trees is the most economical way of enhancing the value of property. A house may be built in a summer, while a home properly shaded by majestic elms can not be produced in a generation. Public parks not only contribute to beauty, comfort, and health, but enhance the value of property.

SELECTION OF VARIETIES.

Perhaps the elm should take first (Continued on Page 369.)

Great American Desert Seeds
are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drought tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.
M. G. Blackman, Grower and Dealer, Hoxie, Kans.

ALFALFA SEED
MOBETH & KINNISON.

Pure Kansas Grown Seed. Crop of 1905. Also Oats and Millet. Macaroni Wheat and other Field Seeds in carload lots or less. Write for prices.
GARDEN CITY, KANSAS.

ALFALFA SEED
F. D. MORRISON.

Kansas Grown. Non-Irrigated. From grower to consumer. Write for prices.
MEADE, KANSAS.

WESTERN SEEDS FOR WESTERN PLANTERS

Elegant FREE CATALOG ready NOW. Write for it. Biggest Stock Choice, Fresh, Tested SEEDS, for Farm, Field and Garden. Full line Flower and Tree SEEDS. We are Buyers of all kinds Field and Grass Seeds. Write to
KANSAS SEED HOUSE Lawrence, Kans., or COLORADO SEED HOUSE, Denver, Colo., or OKLAHOMA SEED HOUSE, Oklahoma City, Okla.

CATALPA AND OSAGE FOR POSTS

Every farmer should grow his own post timber. Get the true catalpa speciosa. We have it. We also offer fruit trees, shade trees, small fruits, grape vines, flowering shrubs, etc. Tell us what you want. We will make the price right.
PETERS & SKINNER, No. Topeka, Kans.

RATEKIN'S SEED CORN

"Pride of Nishna" is a golden yellow, 16 to 24 rows; deep grains and small cob; matures in 95 to 100 days; of great vitality and strength to resist drought and other unfavorable conditions; outyields any other yellow corn in existence, making from 60 to 100 bushels per acre on good land. "Ratekin's Silver Mine," white, has greatest record for large yields of any white corn in the world—averaging 176 bushels per acre in seven states; full counterpart of "Pride of Nishna."
Our Seed all grown from absolutely pure stock, especially for Seed purposes, is carefully selected, sorted, and but and tip ends taken off, and is all graded to uniform size. Seed corn shelled and graded or in the ear. It is the kind that pays to plant. Change your seed and grow bigger and better crops. Price, \$1.35, shelled, sacked on board cars here. Our big illustrated Catalog of all Farm and Garden Seeds is FREE if you mention this paper. Write for it today.
Address, **RATEKIN'S SEED HOUSE, Shenandoah, Iowa.**

PIONEER GUARANTEED NURSERY STOCK AT WHOLESALE PRICES.

All stock guaranteed disease free and true to name.
Hart Pioneer Stock is pure bred and produces heavy crops. Value received for every dollar sent us. No Agent's Commission. WRITE FOR COMPLETE PRICE LIST. WE WILL SAVE YOU MONEY.
HART PIONEER NURSERIES, Established 1885, Fort Scott, Kan.



42 Plants \$2.50

10 Currant Bushes 10 Gooseberry Bushes
10 Raspberry Bushes 10 Blackberry Bushes
1 Concord Grape Vine 1 Niagara Grape Vine

Greatest Bargain yet, 42 plants, all grown, ready to bear fruit, for only \$2.50. Every one should have these lovely fruits growing in their garden. Now is your chance. Order early, and be sure of them.

BAY STATE PLANT CO., Boston, Mass.



15 HARDY CLUMPS, ONLY \$2.00

Don't wait for seeds to grow when you can get these hardy clumps that stay in the ground winter and summer, that will flower for the next 10 years with plenty of beautiful flowers.

- | | |
|--------------------------------------|-----------------|
| 1 Clump Mixed Phlox | All Colors, 25c |
| 1 Clump Mixed Sweet Williams | 25c |
| 1 Clump Mixed Baby's Breath | 25c |
| 1 Clump Mixed Ragged Robin | 25c |
| 1 Clump Mixed Oryanthemum | 25c |
| 1 Clump Mixed Dianthus Pinks | 25c |
| 1 Clump Mixed Golden Glow | 25c |
| 1 Clump Mixed Poppy | 25c |
| 1 Clump Mixed Bleeding Heart | 25c |
| 1 Clump Mixed Coreopsis Harvest Moon | 25c |
| 1 Clump Mixed Heleanthus | 25c |
| 1 Clump Mixed Dahlias | 25c |
| 1 Clump Mixed Hardy Asters | 25c |
| 1 Clump Mixed Hardy Iris | 25c |

This entire collection, worth \$5.00, \$2.00 for only

This fine collection is the best offer ever put on the American market; don't miss it. Send at once for this grand offer.

MALDEN NURSERY, MALDEN, MASS.

The Best Fruit Paper

is The Fruit-Grower, published monthly at St. Joseph, Mo. The regular subscription price is a dollar a year but if you will write for free sample copy and mention this paper, you will receive a proposition whereby you may secure it one year WITHOUT COST. Every one who has a few fruit trees or a garden, should read

THE FRUIT-GROWER
ST. JOSEPH, MISSOURI

Every issue is handsomely illustrated and from \$2 to \$4 pages a month are filled with interesting matter pertaining to fruit-growing and gardening. The first four issues of 1906 will be handsome special numbers devoted to the following subjects: January, The Horticultural Societies; February, Spraying; March, Gardening; April, Small Fruits. Any one of these numbers will be worth a dollar to you. We publish the "Brother Jonathan Series" of fruit books. Send your name and

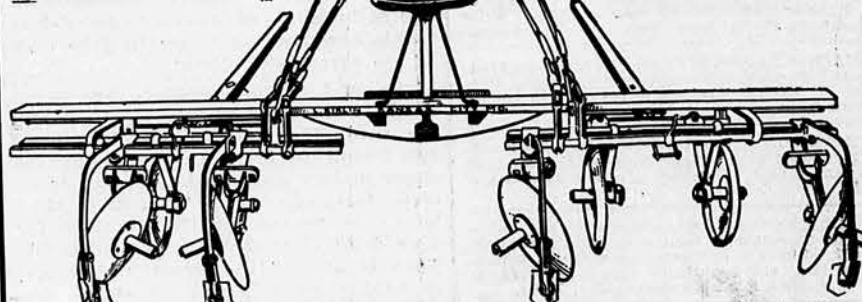
Fruit-Grower Co. 169 S. 7th, St. Joseph, Mo.

When writing advertisers, please mention this paper.

Kirlin's New Improved Double Lever Tongue Disc Cultivator

Original KIRLIN Cultivators... 6,000 now in use

Write for 1906 Catalog showing 8 different styles...



L. KIRLIN, 1208 UNION AVENUE, KANSAS CITY, MO.

POULTRY BREEDERS' DIRECTORY.

BLACK LANGSHAN EGGS at \$1 to \$1.50 per 15 from Hettich strain of World's Fair winners. Mrs. E. Forward, Bayneville, Kans.

ROSE-COMB BROWN LEGHORN EGGS—For sale; also a few cockerels. Bertha Gresham, Bucklin, Kansas.

IN ALL THEIR BRILLIANCY—Rhode Island Reds, Rose-Comb and Single-Comb. Write for circular describing origin, prices of eggs, etc.; it is free. H. A. Sibley, Lawrence, Kansas.

EGGS FOR HATCHING—From one of the best laying strains of S. C. Leghorns in the West, at \$1 per 15 eggs, both brown and white. Special prices on larger lots. L. H. Hastings, Quincy, Kansas.

BARRED AND WHITE ROCKS—Seventeen years breeder of exhibition birds scoring 94% to 96%. Eggs, \$2 per 15; \$5 per 45. Chris. Bearman, Ottawa, Kansas.

PARTRIDGE COCHINS—Toulouse Geese, purebred; farm raised. Eggs \$1 per 15 and 7. Mrs. O. A. Rhoads, R. 6, Columbus, Kans.

CHOICE WHITE WYANDOTTES—Farm range. Eggs 75 cents per 15. Henry Harrington, Clearwater, Kans.

TWENTY-SIX PURE Black Langshan eggs for \$1. Mary McCaul, Elk City, Kans.

BLACK LANGSHANS—Bred by W. F. Cox, Clifton, Kansas. Eggs for sale at \$2 per 15.

STAY WHITE—S. C. W. Leghorns and Buff Rocks. Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kans.

S. C. B. LEGHORNS—Beautiful fowls, fine markings, splendid layers. Eggs, \$1 per sitting; \$5 per hundred. Mrs. D. M. Evans, Edgerton, Kans.

RHODE ISLAND RED EGGS for sale at \$1.25 per 15 eggs, or \$2 per 30 eggs. Mrs. G. F. Kellerman, "Vineyard Farm," Mound City, Kans.

BARRED PLYMOUTH ROCKS—Exclusively. Eggs, \$1 for 15; \$1.50 for 30; \$4 per 100. T. B. Wilson, Route 7, Osage City, Kans.

FOR SALE—Light Brahma and White Wyandotte cockerels. I have a few high-scoring ones left, as it is getting late I will now offer them at a bargain, \$2 to \$5, scoring 92 to 94. Satisfaction guaranteed. Eggs, \$1 to \$2 for 15; Buff Cochins Bantam eggs, \$1 to \$2. Mrs. J. R. Kenworthy, Wichita, Kans.

BARRED PLYMOUTH ROCKS—Either cockerel or pullet. Mating pens headed by 91% to 93 point birds; females 91% to 93%. Eggs, \$2 per 15. Utility pen cocks, \$1 to 92%; \$1 per 15, \$5 per 100. Silver Pencilled Wyandottes headed by "Patsy," 1st cock Detroit 1904, score 94%; females 87 to 91. Eggs, \$2 per 15. Mrs. Chas. Osborn, Eureka, Kans.

EGGS—S. C. White Leghorn, exclusively. Blue ribbon winners; 15 for \$2; from flock, 100 for \$5. W. O. Watt, Walton, Kans.

FOR SALE—Throughbred Gold-laced Wyandottes. Eggs, \$1 per sitting. H. A. Montgomery, 310 Parallel St., Atchison, Kans.

GOLDEN WYANDOTTES EXCLUSIVELY—My flock of vigorous farm-raised hens culled by standard to 60. No stock for sale. Eggs, \$1 per 15; \$5 per 100. Mrs. S. Goldsmith, R. F. D. 3, Abilene, Kans.

CHICK-O for baby chicks; a complete, balanced ration. Ask your dealer or write, D. O. Coe, Topeka.

BARRED PLYMOUTH ROCKS—Bradley strain, prize winners; won 1st on chl. last three years at Harvey county poultry show. Eggs from pen \$2, yard \$1 per 15. R. Harmon, R. R. 6, Newton, Kans.

WHITE WYANDOTTES EXCLUSIVELY—Eggs, 15 for 75c; 100 \$3.50. H. F. Brueggemann, Route 2, Herington, Kans.

PURE BRED White Wyandotte eggs for sale; \$1.00 for 15. Mrs. C. E. Williams, Irving, Kans.

S. C. W. LEGHORN cockerels and pullets scored by Rhodes 92 to 94% points. Write for prices. A. F. Hutley, Maple Hill, Kansas.

FINE BLACK LANGSHANS started from \$3.00 eggs. Fifteen eggs for 50 cents. Minnie D. Price, Route 3, Paola, Kansas.

BLACK LANGSHAN EGGS—From main flock, 15 for \$1.00; 100 for \$5.00; from pen, \$2.00 for 15. Mrs. Geo. W. King, Route 1, Solomon, Kansas.

WHITE PLYMOUTH ROCK exclusively—bred direct from a pen of U. R. Fisher's birds. Eggs for hatching from pen No. 1 \$2 per 15. Satisfaction guaranteed. J. A. Kauffman, Abilene, Kansas.

FOR SALE—Silver Laced Wyandottes, White Plymouth Rocks and Partridge Cochins. Fine stock, each raised on a separate ranch. Eggs, per sitting of 15, \$1. Letters promptly answered. Address W. C. Koenig, Nortonville, Kan., First Nat'l Bank Bldg.

BARRED ROCK EGGS, \$3 per 100. Mrs. R. A. Galbraith, White City, Kansas.

BUFF, BLACK AND WHITE LANGSHANS, Buff Leghorns, Buff Orpingtons, Light Brahmas, M. B. turkeys, and Toulouse geese. From prize winners and imported fowls; are extra fine. Write today. America's Central Poultry Plant, J. A. Lovette, Proprietor, Mullinville, Kansas.

WHITE PLYMOUTH ROCK EGGS from high-scoring show birds, \$1.50 per 15; \$2.50 per 30. Incubator eggs, \$5.00 per 100. M. B. turkey eggs, \$5.00 per 11. J. C. Bodewick, Route 2, Hoyt, Kansas.

GREAT BIG S. C. BUFF ORPINGTONS are the winter layers. Eggs \$1.50 per 15; \$2.50 per 30. Mrs. J. R. Cotton, Stark, Kans. 225 Main Street.

VANNATT'S SINGLE COMB WHITE LEGHORNS—Great layers. Won \$100 Cash at World's Fair. Eggs for hatching. Catalogue free. E. E. Vannatta, Vandalia, Mo.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

FOR SALE—All kinds of fancy pigeons, also Toulouse geese eggs at \$1 per sitting. Pekin and Rouen duck eggs, 18 for \$1. Muscovy duck eggs, 10 for \$1. Turkeys, Peacocks, Barred Rocks, Buff Cochins, Houdans, S. S. Hamburgs, Rhode Island Reds, Orpingtons, White Buff and brown Leghorns, White Buff and Silver-Laced Wyandottes, Games, Golden Sea-bright Bantams, Pearl and White guinea, hunting dogs. Poultry eggs 15 for \$1. Write D. L. Bruen, Platte Center, Neb.

WHITE WYANDOTTES—the lay all winter kind. Bred to high score, large egg record cockerels. Dustin strain. Eggs 5 cents each. \$4 per 100. J. L. Moore, Eureka, Kans.

WHITE PLYMOUTH ROCKS—12 years breeder of choicest birds. Eggs \$1.50 per 15. Member American White P. R. Club. J. E. Shinkle, Lakin, Kans.

BARRED ROCKS—40 cockerels, \$2 will buy a good one \$50 pullets, \$1 each, sired by a pure Bradley cock. I have an orchard flock of 80 pullets mated with large, standard males, eggs \$1 per 15; \$5 per 100. A. C. Rait, R. 4, Junction City, Kans.

BARRED ROCK EGGS—Pen No. 1, \$1.50 per 15; pen No. 2, \$1 for 15. Mrs. W. A. Shreier, Argonia, Kans.

The Poultry Yard

How Shall I Start?

A reader living in eastern Massachusetts asked the New England Farmer's advice as to doing more and better work with poultry on his farm, and says he has become convinced that eggs and poultry for market will pay him a better profit than any other line of farmwork.

This subject came up one day at the dinner table, during the poultry conference at Guelph, Ontario, and the New England Farmer editor asked three or four of the men present how they would answer such a question. One answered: "Get rid of his old, lousy, scrub hens and get good, pure-bred stock." The professor answered, sententiously: "Clean up!" The discussion which the several answers excited gave differing methods of reaching the same result, and the editor pitched upon the two answers given above as going to the root of the whole matter—only that he unites them into one answer.

He says: "That there is urgent need of a thorough cleaning-up of poultry house, or room, or quarters, on every farm where poultry is kept, there is ample evidence, and that such a cleaning-up will give best results, if joined with a getting rid of the old, lousy birds which are seen on most farms, goes without saying. Indeed, the getting rid of the old, common stock is generally the first step to recommend, because no self-respecting man will put the new, better birds into the filthy old house or room. Having decided to have better poultry, he will, from just common decency, put the quarters into decent condition to house them.

"The question is the most interesting at this time because we are at the beginning of a new season, when we are bringing on a new generation of poultry, and the spring is the most favorable time to start. This is supposing we are to start with hatching the new stock from eggs of pure-bred fowls, and that is doubtless the cheapest and easiest way in which to make a wholly new start. Starting in this way, that is, by buying eggs of the chosen variety, we can raise the new stock wholly free of the handicaps of the old by keeping the chickens wholly separate from the old, and then kill off for market every old bird on the place before the youngsters get mature and want the house-room. By having the house (or room) thoroughly cleaned up and whitewashed this summer, and keeping the youngsters wholly separate from the old birds, the youngsters should not get lousy when they come into their quarters in the fall, and they start into their winter's work innocent of that very serious handicap.

"Believing that a good many readers of this page are like minded, we will give a little space in several future numbers to a consideration of this question, namely, How Shall I start?

"Our friend says that he wants to have a hundred well-matured pullets to go into their winter quarters next fall, and asks how many eggs he should plan to incubate to assure that number. That there are many slips between the cup and the lip we all know, and if we were planning for a hundred pullets we would incubate eight hundred eggs, upon the expectation that we would need to incubate four eggs to secure one well-developed chicken, and that half the chickens would be pullets. That this is a conservative estimate many will claim, and there is the experience of Prof. Gowell, of the Maine Experiment station, last year, to back them up; the professor wanted 1,500 pullets and planned to incubate 9,000 eggs, estimating that he could raise a chicken from each three eggs incubated. The eggs hatched better than he expected (they were laid by dry-fed hens), and the chickens, being dry-fed, lived better than he expected, and he found himself in the fall the fortunate possessor of a few over 2,000 fine, "husky" pullets, and actually had to build an additional hundred-feet to his new poultry house to take care of the extra 500 pullets!

"By and large, however, we would think it the part of wisdom to be on the safe side, and would recommend our friend to incubate four eggs for every mature chicken he wants. If he is so fortunate as to have more than he wants, he can readily sell them for a good price—if they are of good stock. That is one of the great advantages of having good, pure-bred stock; you can turn it into cash in a day! Prof. Gowell had that opportunity with his

POULTRY BREEDERS' DIRECTORY.

BLACK LANGSHANS—Hens scoring 93 and upwards—headed by 2d and 4th prize cockerels from Kansas City 1906 show. Eggs, \$2 for 15; \$3.50 for thirty; special price by hundred. Can fill orders at once. Mrs. C. S. Cross, Fair Acres Farm, Emporia, Kansas.

BUFF PLYMOUTH ROCK eggs for sitting, \$1.50 for 15. Jay S. Buck, Oskaloosa, Kansas.

BARRED AND WHITE ROCK EGGS for hatching from choice birds; farm raised. White Rock eggs, 15 for \$1; 30 for \$1.85; 45 for \$2.55. Barred Rock eggs, 15 for 75 cents; 30 for \$1.45; 45 for \$2.10. D. S. Thompson, Welda, Kansas.

FOR SALE—White Plymouth Rock cockerels from high-scoring birds, and a few hens and pullets. Eggs for sale at reasonable price. Mrs. M. Luse, Nortonville, Kansas.

S. C. B. LEGHORNS—Some choice cockerels for sale, \$1 each. Eggs in season. Mrs. L. C. Peterson, Route 1, Osage City, Kansas.

WHITE WYANDOTTE EGGS for sale; \$1.50 per 15. Only breed of birds kept. Mrs. John W. Smith, Lawrence, Kansas.

WHITE HOLLAND TURKEY EGGS—\$1.50 per 9. T. J. Sweeney, Route 2, Maple Hill, Kansas.

FOR SALE—Young M. B. turkey toms from high-scoring, prize-winning stock. Book your orders now and secure early eggs for hatching, \$2 per 9. S. C. Brown and White Leghorns, S. Spangled Hamburgs, S. C. Black Minorcas, \$1 per 15. Vira Bailey, Kinsley, Kansas.

SILVER LACED WYANDOTTES—Thoroughbred cockerels, \$2; pullets, \$1.50. Jewett Bros., Dighton, Kansas.

GEM POULTRY YARDS—C. W. Peckham, Haven, Kans. Pure-bred Buff Plymouth Rock eggs, 15 for \$2; 30, \$3.50. M. Bronze turkey eggs, 11 for \$5.

CHOICE B. P. ROCK cockerels and pullets. Collie pups; send for circular. W. B. Williams, Stella, Neb.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes, \$1 per 15. W. H. turkeys, \$1.50 per 9. Emment geese, 20c each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hutley, Route 2, Maple Hill, Kansas.

FOR SALE—Exhibition S. C. Black Minorca cockerels, \$2. I guarantee them. Address George Kern, 817 Osage street, Leavenworth, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 501 East First street, Newton, Kansas.

S. C. W. LEGHORNS AND BUFF ROCKS—Winners at State Fairs. Eggs, \$1 per sitting. J. W. Cook, Route 3, Hutchinson, Kansas.

TO GIVE AWAY—50 Buff Orpingtons and 50 Buff Leghorns to Shawnee county farmers. Will buy the chicks and eggs. Write me. W. H. Maxwell, 921 Topeka Avenue, Topeka, Kansas.

WHITE WYANDOTTES—Choice cockerels, pullets or hens for sale cheap. S. W. Arts, Larned, Kansas.

BLACK LANGSHAN EGGS—From birds scoring 93% to 95%, \$1.50 and \$2 for 15 eggs. Wm. C. Knapp, Pleasant Hill, Mo.

BARRED ROCKS EXCLUSIVELY—Lettel strain. Large, heavy-bodied, fine, clear; Barry's first-class birds, \$1 to \$5 each. Satisfaction guaranteed. Write for catalog to Larned Poultry Yards, John D. Ziller, Hiawatha, Kansas.

WHITE WYANDOTTE COCKERELS (Stay White), \$1 to \$5 each. Eggs, \$1.50 per 15. S. W. Arts, Larned, Kansas.

MAMMOTH BRONZE TURKEYS for sale. Inquire of Mrs. T. M. Fleming, Fontana, Kans.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more, 80 cents each. Fine white, pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Coulterville, Illinois.

BROWN CHINA GEESSE, Indian Runner Ducks, also Barred Rock cockerels. Prize winners at State Poultry Show. O. C. Sechrist, Meriden, Kansas.

Mammoth Bronze Turkeys—For sale—Young toms and pullets, healthy and well-bred stock. Inspection and correspondence invited. Address J. E. Miller, Burdette, Kansas.

LIGHT BRAHMAS—More prizes than any breeder in the state: 10 firsts this season. Eggs, \$1.50. Cockerels, \$2 to \$4. T. F. Weaver, Blue Mound, Kansas.

Eggs for Hatching—M. B. turkeys, \$3 per 10. Golden Wyandottes, \$2. \$1.50 and \$1.25 per 15. Satisfaction guaranteed. Mrs. A. B. Grant, Emporia, Kansas.

Barred Plymouth Rocks—Exclusively—"Superior Winter Laying Strain" noted for size and quality. Seventeen years of careful breeding. Eggs, 15 for \$1; 30 for \$1.50. E. J. Evans, Route 4, Fort Scott, Kansas.

Rose Comb Brown Leghorns EXCLUSIVELY—Farm raised. Eggs, per sitting of 15, \$1. Incubator users write for special prices in 100 lots. P. H. MAHON, Route 3, Clyde, Cloud Co., Kans.

ROSE COMB BROWN LEGHORNS AT READING, KAN.—Pure stock. 15 eggs \$1.00; 50, \$2.75; 75, \$4.00; 100, \$5.00. Main flock farm range. Have pen to furnish eggs no relation to stock or eggs sold last year. These are for my last year's customers. MRS. IDA STANDIFER, "Up-To-Date" Farm.

15 BREEDS. Pure-bred Chickens, Ducks, Geese and Turkeys. Largest poultry farm in southern Minnesota. Choice stock and eggs for sale. Catalogue free. H. H. HINIKER, Box 90, Mankato, Minn.

PRIZE-WINNING S. C. BROWN LEGHORNS—Exclusively. (Short's strain.) Farm stock eggs from pen scoring 106, \$2 per 15; \$1 per 15 as they run. Incubator eggs a specialty. MRS. W. O. MADATAGEN, BEATTIE, KANS. Mention KANSAS FARMER when writing.

Neosho Poultry Yards—Rose Comb R. I. Reds exclusively. Two first, one second and one third prizes at the Emporia, Dec., 1906, Show. One pen of fine red pullets and hens mated to a red male for producing red pullet eggs from this yard. \$2 per 15, others at \$1.50. J. W. Swartz, Americus, Kansas.

POULTRY BREEDERS' DIRECTORY.

R. C. Rhode Island Reds—At the State Poultry Show, Topeka, Kansas, January, 1906, won first and second prizes on cock, cockerel, hens, pen; fourth on hen and pullet. Cockerels all sold. Eggs for hatching, \$1.00 to \$3.00 per 15. Egg circular free. **NO STOCK FOR SALE.** A. D. WILLEMS, Inman, Kans.

BLACK LANGSHANS

Bred by John Shank, New Cambria, Kansas. Stock and eggs for sale. Eggs, \$2 per 15.

Fancy Black Langshans

G. C. MILLER, Breeder. Stock for sale. Fifteen eggs for \$2. Address 546 Missouri St., LAWRENCE, KANS.

Light Brahma Chickens

Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kan. Route 4

PARK VIEW FARM

WHITE PLYMOUTH ROCK EGGS for sitting—Fine stock; farm raised. Price, \$1 for 15; special price by the hundred. Shipped by express, carefully packed, anywhere. Mrs. O. E. Walker, Route 8, Topeka, Kans.

S. C. RHODE ISLAND REDS

Winner at 1906 Kansas State Poultry Show—1, 2, 3, 4, 5 pen; 1, 2, 3, 4, 5 hen; 2, 3, 4, 5 pullet; 2, 4, 5 cockerel. Young cockerels for sale. Eggs, \$1.50 to \$2.50 for 15, from high-scoring pens. E. B. Steele, Sta. B, Topeka, Kans.

ACME CHAMPIONS Bronze turkeys. Show Champions, Topeka and St. Joseph, winning ten 1st, three 2nd, two 3d prizes; only 7 birds entered. Barred Rocks, 1st, 3d hen, Topeka, 93%, 92%, 5th cock 90%; 4th pen St. Joseph, 2d hen 92%, 3d cock 91, own 2d cockerel, 93%. Eggs, \$3 per 15; \$5 per 30. M. B. Turkey eggs \$1 each. Cockerels for sale. Pullet breeders specialty. Mrs. W. B. Popham, R. F. D., Chillicothe, Mo.

SAVE YOUR CHICKS.

Use the Itumar Mite and Lice Killer, a mite and lice destroyer. Guaranteed to kill mites and lice if properly used. If not satisfied return bottle and label and money will be refunded.

CHAS. E. MOHR, Glendale Park, Hutchinson, Kans.

Rose and Single Comb White Leghorns and White Wyandottes **IN ALL THEIR PURITY** Unsurpassed in every respect for beauty, utility and winter layers. At State show the largest in the United States, just held at Topeka, Kans. 26 prizes were awarded me. Write for my catalogue, giving prices on stock and eggs. W. S. YOUNG, McPherson, Kans. When writing mention this paper.

INCUBATOR EGGS

From high grade White Rocks and White Wyandottes.

\$3.00 for 50, \$5.00 per 100 SEND FOR CIRCULAR. W. L. BATES, Topeka, Kans.

Eggs for Hatching

Send for my special Barred Rock circular; also ten other varieties of choice standard leaders. All free. Write me your wants. A. H. DUFF, Larned, Kansas

CHICK FEED

The cleanest, purest feed for baby chicks on the market. Every day egg producer on alfalfa meal, starts the hens to laying and keeps them laying. Wholesale poultry supplies. Send for circular.

The Otto Weiss Alfalfa Stock Food Co. Wichita, Kansas

At Topeka 1906

Our Buff P. Rocks won all shape and color prizes awarded. Our first prize pullet scored 94 (cut 1 for injured eye). Our winning Houdans, White Plymouth Rocks, and White Wyandottes, are the same quality. We have very fine S. C. B. Leghorns. Judge Helmlich cut our White Rock cock 1/4 of a point for color of entire bird. Eggs from pens we hatch \$2 per 15; \$5 per 100. Standard Poultry Yards, Abilene, Kans.

Prize Winners S. C. Buff Leghorns bred for utility and perfection **S. C. BUFF ORPINGTONS BIG BUFF BUSTERS JUMBO SQUAB BREEDERS USEFUL PIGEONS** Catalogue and Price List with useful information free for asking. W. H. Maxwell, 1220 Quincy St., Topeka, Ks.

White Plymouth Rocks EXCLUSIVELY.

Good for Eggs, Good to Eat and Good to look at. W. P. Rocks hold the record for egg-laying over every other variety of fowls; eight pullets averaging 280 eggs each in one year. I have bred them exclusively for twelve years and have them scoring 94 to 96%, and as good as can be found anywhere. Eggs only \$2 per 15; \$5 per 45, and I prepay expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B, Topeka, Kans.

POULTRY BREEDERS' DIRECTORY.

What Two Lice Can Do

They can virtually go right down in the poultry keeper's pocket and take the money. If left undisturbed the natural increase is so great that they soon multiply to a swarm that will sap the life of young chicks, breed disease in the pens and ruin profit.

Instant Louse Killer

(Powder or Liquid)

kills lice on poultry, lice on stock, and ticks on sheep. It is harmless to use, and will effectively destroy cabbage worms, slugs on rose bushes, and bugs on cucumber, squash and melon vines. Instant Louse Killer is the original powder louse killer put up in round cans with perforated top. Look for the word "Instant" on the can—then you won't get an imitation.

1 lb. 25c { Except in Canada and extreme West and South
3 lbs. 60c

If your dealer cannot supply you we will forward 1 lb. by mail or express, prepaid, for 35c.

Manufactured by
DR. HESS & CLARK,
Ashland, Ohio.

S. L. Wyandottes

Indian Runner ducks. Our Wyandottes have been bred for 20 years and never fail in any company. Our yards are headed by Silver Prince, the 1st cock at the Kansas State Show, and three of his cockerels. Stock for sale. Eggs, \$2 per setting. Incubator eggs, \$5 per hundred. Duck eggs, \$1.50 per setting.

M. B. CALDWELL, Broughton, Kansas

GREIDER'S FINE CATALOGUE of Standard bred poultry for 1906, printed in beautiful colors, contains 150 Chromes, illustrations and describes 60 varieties. Gives reasonable prices for stock and eggs, tells all about poultry, their diseases, lice, etc. This book only 10 cents.
B. H. GREIDER, RHEIMS, PA.

STEINNESCH'S CHICKENS
Winners at St. Louis and Portland. Farm raised. 15 varieties. Catalog FREE. Contains "Some Good Suggestions." Write: Steinnesch & Co., 312 Market St., St. Louis, Mo.

\$12.80 For 200 Egg INCUBATOR
Perfect in construction and action. Hatches every fertile egg. Write for catalog to-day.
GEO. H. STAHL, Quincy, Ill.

BEE SUPPLIES

We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders.
Topeka Supply House
7th and Quincy, Topeka, Kansas.

\$7.00 Buys the Best 120-EGG Incubator
freight prepaid, ever made. Double cases all over; best copper tank; hot water; self-regulating. Best 100 chick hot water Brooder \$4.50. Incubator and Brooder ordered together \$11.00. Satisfaction guaranteed. Our book, "Hatching Facts" tells all about them. Mailed free. Write today.
Belle City Incubator Co., Box 18, Racine, Wis.

SCOTCH COLLIES.
SCOTCH COLLIES—Scotch Collie pups from registered stock for sale. Exporters, Kennels, W. H. Richards, V. S., Emporia, Kans.

SCOTCH COLLIE PUPS for sale, \$4 and \$5 each. Pedigrees furnished. G. B. Gresham, Box 102, Bucklin, Kans.

STOLL'S STAY-THERE EAR MARK.
The best and cheapest ear-mark made. It possesses more points of merit than any other mark. Send for samples. J. B. Stoll, DeS Moines, Neb.

surplus, and a visiting poultryman offered him \$500 for 200 of those good pullets; two dollars and fifty cents apiece! They were not "fancy" Barred Rocks, either, although the offer was from a fancy poultry breeder and judge of pure-bred poultry at many large shows. They were simply good, pure-bred Plymouth Rocks, well-hatched, grown, and fully matured by October—and after the professor had declined his offer the poultry man making it told him they were the best average lot of Barred Rock pullets he had ever seen! Just think of it—and the man that said that has been breeding fine show stock for years and years! Possibly he, too, has yet something to learn about raising good, well-matured pullets."

Thoroughbred Poultry.

There are so many people who say, "a hen is a hen anyway," meaning by that that there is no difference between a thoroughbred hen and a mongrel, that it grates on the nerves of the thoroughbred poultry breeder. The aim of all true poultry men is "more flesh and more eggs," and by their efforts these have been augmented from year to year. A recent article by T. F. McGrew, of New York, a poultry expert of National reputation, is right to the point. We take pleasure in quoting it. "In grandfather's time if the hens produced twenty-five or thirty eggs during the year, and the greater portion of these in the springtime, it was all that was expected of them. These were known as the dunghill or barnyard fowls. About 1867 the era of progress in poultry industry in this country commenced. The census of 1870 gave an average of about 30 eggs per hen per year from the limited information gathered. Thirty years later the census report credits about 70 eggs per hen as the average product of the United States. All of this increase has come from the one source of better poultry, created under the influence of the fancier, who pays special attention to what should be known as "Standard-Bred Poultry."

In the egg-laying contests conducted under either private, State or National control in this country, Australia or England, there has never been recorded to our certain knowledge an instance where mongrel or cross-bred fowls won the laurels or came anywhere near doing so. The best market poultry, the best turkeys and waterfowls of all kinds are those bred direct from some one of the many standard-bred varieties. If there is anyone who can gain-say these statements and prove us in error, let him do so; but so long as there can be no contradiction to these facts, why should anyone in the wide, wide world continue to harbor cross-bred, mongrel stock in hopes of making a profit therefrom, when the evidences are so overwhelming that only those who keep properly selected stock for the intended purposes, make money from the growing of poultry.

The best egg-producing hens, the best meat-producing hens, the finest market turkeys, ducks, and geese come into our markets only through the existence of standard-bred poultry. We have not in all our experience known of a single instance where "even value received in the keeping of poultry came from the possession of the common barnyard stock," and in every instance of profit and success, the ground work or foundation of the same is from some one or more of the standard-bred varieties. The expense of possessing good stock of this kind is so slight as to prevent no one from having the same. Gradually, from any farm, every single head of the old time, ante-dated, unvaluable stock can be sold, and the money received from same expended for some of the better kinds that anyone can hope to succeed with. These are facts that can not be gainsaid or disputed. Every one familiar with growing of poultry fully realizes this to be the condition. With this overwhelming proof all in one direction, how it can be possible for the agricultural interest of the country to cling to a single, old-fashioned hen in hopes of gaining something from her, is more than any of us, who are familiar with the situation that governs conditions which have increased the poultry products of this country from a mere pittance to over \$500,000,000 per year, can understand.

Mites and Hawks—Two Chicken Enemies.

In his lectures before the students of the Agricultural Department of the University of Missouri last week, T. E. Orr, Secretary of the American Poultry Association, gave methods of combating mites and chicken-hawks, that might easily be used by every Missouri housewife.

Mites, he says, may be gotten rid of



DON'T SEND EAST for your Single Comb Brown Leghorns. In four shows this season I have won 15 out of 19 blue ribbons competed for, and in three of these shows have had highest scoring bird in the show. Scores as high as 96% by Owen and Atherton and 94% by Rhodes. Stock for sale. Eggs, \$1 for 15; \$5 for 100.
CHAS. C. SMITH, Manhattan, Kansas.



The "QUEEN" is not an incubator but the Incubator

THE HIGHEST GRADE INCUBATOR EVER OFFERED TO THE PUBLIC

The advent of these superior machines marks the departure of the hen-set chicks. If you want the best money will buy, get the QUEEN. Write today for free catalogue.

PINKERTON MANUFACTURING CO.
BOX 56, LINCOLN, NEBRASKA

NEW and RECENT POULTRY BOOKS

The New Egg Farm

By H. H. Stoddard. A practical, reliable manual upon producing eggs and poultry for market as a profitable business enterprise, either by itself or connected with other branches of agriculture. It tells all about how to feed and manage, how to breed and select, incubators and brooders, its labor-saving devices, etc., etc. 140 original illustrations. 331 pages. 5x7 inches. Cloth, \$1.00.

Turkeys and How to Grow Them

Edited by Herbert Myrick. A treatise on the natural history and origin of the name of turkeys; the various breeds, the best methods to insure success in the business of turkey growing. With essays from practical turkey growers in different parts of the United States and Canada. Illustrated. 154 pages. 5x7 inches. Cloth, \$1.00.

Poultry Architecture

Compiled by G. B. Fiske. A treatise on poultry buildings of all grades, styles and classes, and their proper location, coops, additions and special construction; all practical in design, and reasonable in cost. Over 100 illustrations. 125 pages. 5x7 inches. Cloth, \$0.50.

Poultry Appliances and Handcraft

Compiled by G. B. Fiske. Illustrated descriptions of a great variety and styles of the best homemade nests, roosts, windows, ventilators, incubators and brooders, feeding and watering appliances, etc., etc. Over 100 illustrations. Over 125 pages. 5x7 inches. Cloth, \$0.50.

Poultry Feeding and Fattening

A handbook on the standard and improved methods of feeding and marketing all kinds of poultry, covering all branches, including chickens, broilers, capons, turkeys, water fowl; how to feed under various conditions and for different purposes. Illustrated. 160 pages. 5x7 1/2 inches. Cloth, \$0.50.

American Standard of Perfection

A complete description of all recognized varieties of fowls, as revised by the American poultry association at its twenty-eighth annual meeting. It contains all changes in and additions to the constitution and by-laws, and the text of the standard, as authorized to the present time. Illustrated 300 pages. 5 1/2 x 2 3/4 inches. Cloth, net, \$1.50.

THE KANSAS FARMER CO.

Topeka,

Kansas

by spraying the chicken-house with a mixture of one part crude carbolic acid and eight parts of carbon oil. This mixture he recommends in preference to mite exterminators sold by traveling agents.

Hawks, he claims, may be kept out of the poultry-yard by attaching bright pieces of tin, six by ten inches, to the trees and poles surrounding the quarters, by strings two feet long, so that the wind will make the bright metal dance in the sunlight.

Won a Moral Victory.

Miss Clara Logan, the Queen Titania of the Asbury Park baby parade, sat by a log fire, telling stories of children.

"A woman," she said, "reclined on a couch in her library one night with the light low, trying in vain to go to sleep.

"Beside her, on a table, was a dish of fine fruit.

"As she lay there she saw her little daughter tiptoe into the room in her long, white nightgown. The child, thinking her mother asleep, advanced cautiously to the table, took a bunch of grapes and stole out again.

"The mother was grieved at such misconduct on the part of her good little daughter, but she said nothing.

"Five minutes passed. Then back into the room crept the child, the grapes in her hand, untouched. She replaced them on the dish, and, as she departed, her mother heard her mutter:

"That's the time you got left, Mr. Devil."

It is a maxim, that those to whom everybody allows the second place have an undoubted title to the first.—Swift.

Man makes a death which nature never made.—Young.

Good Hatches Promised

It's a pleasure to hatch lots of chicks in a **HATCH-ALL INCUBATOR**. Pure air, even heat, little care, simple directions make it easy for beginners or experienced to make money on poultry. Write for free catalog to
RELIABLE INCUBATOR CO., Box 18, Hebron, Neb.

Our Money-Back Guarantee

Every incubator we sell absolutely money-back guaranteed to do all we claim. The 1906 Reliable is the only incubator with double heating system. Free catalog tells all about it. Pure-bred Poultry and Eggs for hatching. Ask for prices.
Reliable Incubator & Brooder Co., Box B-62 Quincy, Ill., U.S.A.

SHOEMAKER'S BOOK ON POULTRY

AND ALMANAC FOR 1906.
There is nothing in the world like it. It contains 224 large pages, handsomely illustrated. A number of most beautiful Colored Plates of Fowls true to life. It tells all about all kinds of Thoroughbred Fowls, with life-like illustrations, and prices of same. It tells how to raise poultry successfully, and gives working plans and illustrations of convenient Poultry Houses. It tells all about
Incubators and Brooders.

It gives full instructions for operating all kinds of Incubators. This chapter is marvelously complete and worth dollars to anyone using an incubator. It gives descriptions and prices of Incubators, Brooders and all kinds of Poultry Supplies. In fact, it is an encyclopedia of chickenhood and will be mailed to anyone on receipt of only 15 cents. Your money returned if not pleased.
C. C. SHOEMAKER, Box 488 FREEPORT, ILL.

Take Your Own Old Trusty Incubator

40, 60 or 90 Days Trial.

We want to send you the "Old Trusty" Book. You ought to read it before buying an incubator, because it has more every-day "chicken sense" in it than any catalog you have ever seen. 300 good pictures. It tells why "Old Trusty" does such good work—why it hatches so many and so good chicks—why it is so easy to operate—why it is so economical. It's sold on 40, 60 or 90 days trial, freight prepaid. Write to us.

M. M. Johnson Co.,
Clay Center, Neb.

We Pay the Freight.

Dairy Interests

Balanced Rations for Cows.

Will you please give me the cheapest balanced ration for dairy cows from the following feeds and prices.

Please send me bulletin No. 115, and put my name on your mailing list.

Corn, shelled, per bu. \$ 0.36
Kafir-corn, seed, per bu. 0.60
Oats, per bu. 0.35
Bran, per ton 17.50
Oil meal, per cwt. 2.25
Alfalfa hay, per ton 7.00
Kafir-corn fodder, per ton 3.50
Mitchell County, W. H. MEARS.

From the prices of the feeds given, the values per pound are easily calculated and found to be:

	Cents.
Corn64
Kafir-corn seed	1.07
Oats	1.10
Bran875
Oil meal	2.25
Alfalfa35
Kafir-corn stover175

As Kafir-corn grain and corn are about equal in feeding value, with the advantage in favor of corn, we may at once cut out the former as too expensive at 60 cents per bushel. Kafir-corn fodder is your cheapest feed but it is not at all adapted to milk-production unless balanced by some highly nitrogenous feed. We can not see at a glance whether or not it will be economical to use it when so balanced. I am sending you a copy of Bulletin No. 115, and in Table IV, beginning on page 130, you will find about 2,700 balanced mixtures ready calculated for various purposes in feeding. Pages 128-9 give an explanation of the table and from the data which it contains you should be able to calculate for yourself what rations would be cheapest. However, to assist you I will calculate the cost of a few.

Let us begin with corn and alfalfa; that will certainly be a combination hard to beat for economy and efficiency. You do not say how much milk your cows are giving, but if we assume a nutritive ratio of 1:6 for their ration we shall not be far wrong. That would be right for cows giving about sixteen pounds of milk per day. Turning to page 144 of the bulletin, we find under nutritive ratio 1:6 that corn and alfalfa must be used in the ratio of 30.8 of the former to 45.6 of the latter. If we add these two quantities together and divide each by the sum, it will give us the quantities of each to be taken for one pound of the ration. Thus: $30.8 + 45.6 = 76.4$; $30.8 \div 76.4 = 0.4$, and $45.6 \div 76.4 = 0.6$. Hence four-tenths of a pound of corn with six-tenths of a pound of alfalfa hay will give one pound of a ration with the nutritive ratio 1:6. From this you can easily calculate how much of each to weigh off for large amounts.

For each thousand pounds weight of herd you will need about 27.5 pounds per day in the ration. If in each pound there are four-tenths of a pound of corn, there will be $0.4 \times 27.5 = 11.0$ pounds of corn in 27.5 pounds of the daily ration, and $0.6 \times 27.5 = 16.5$ pounds of alfalfa. This, you notice, is a very good ratio between the grain and the roughage. The cost would be: $11 \times 0.64 = 7.1$ cents for the corn, and $16.5 \times 0.35 = 5.8$ cents for the alfalfa hay; total, 12.9 cents per day, per thousand pounds weight of herd.

In a similar manner, by making the calculations for other possible combinations of the feeds you name, we obtain the results exhibited in the following table:

Amount and cost of feeds balanced to a nutritive ratio of 1:6, and in quantities to make 11 pounds of concentrate and 16.5 pounds of roughage.

Balanced No. feeds.	Pounds of each feed.	Total pounds.	Cost of each feed.	Total cost of weight stated.
1. Corn	11.0	27.5	7.1	12.9
Alfalfa	16.5		5.8	
2. Corn	8.6	11.0	5.5	10.9
Oil meal	2.4		5.4	
3. Alfalfa	9.7	16.5	3.4	4.6
Kafir-corn stover	6.8		1.2	
4. Corn	4.5	11.0	2.9	8.6
Bran	6.5		5.7	
5. Bran	16.0	27.5	14.0	16.0
Kafir-corn stover	11.5		2.0	
6. Oil meal	5.3	27.5	11.9	15.8
Kafir-corn stover	22.2		3.9	

In the above table I have balanced Kafir-corn stover, your cheapest roughage, with the only three feeds which you name that will do, and I have balanced corn, your cheapest concentrate, with the only three of your feeds that can be used. To facilitate the comparison

son I have calculated them all to 11 pounds of concentrate and 16½ pounds of roughage where possible, and to 27½ pounds where the ration contains both the concentrate and roughage. In ration 3, the Kafir-corn fodder is balanced by alfalfa and the roughage ration of 16½ pounds would cost but 4.6 cents. Either mixture, 2 or 4, could be used with it as a grain ration. Eleven pounds of the corn and oil-meal mixture would cost 10.9 cents, while the corn and bran mixture would cost but 8.6 cents. Adding together Nos. 3 and 4, you see that a ration consisting of 9.7 pounds of alfalfa, 6.8 pounds of Kafir-corn stover, 4½ pounds of corn and 6½ pounds of bran would cost 13.2 cents. It is therefore slightly dearer than the ration consisting of corn and alfalfa only. With this combination, however, you have the advantage of having the concentrate balanced within itself, and the roughage also balanced in the same way. If you wish to feed less or more concentrate than 11 pounds you can do so without disturbing the balancing of the ration in respect to protein and non-protein. This affords a convenient means of modifying the feed for individual animals. It is possible, too, that the greater variety afforded by this ration would give better results than the simpler one consisting of corn and alfalfa alone. You will readily see that Nos. 2 and 4 might be used as a part of the ration consisting mainly of No. 1.

No. 5 would be balanced, but has too much bran and too little stover for a practical feed; its cost, 16 cents, is almost the same as No. 6, which is scarcely practical either, requiring so large an amount of oil-meal. In any case Nos. 5 and 6 are cut out by their higher prices, though the two added together would make a double ration which would be about right in the relative amounts of concentrates and roughage. Reducing it to the same basis as the others, it would consist of 8 pounds of bran, 2.65 pounds of oil-meal, and 16.8 pounds of Kafir-corn stover.

I can not often give time to make such detailed calculations as the above, but in this case the question was so clear-cut, and the feeds so practical that it seemed to have more than ordinary interest. I should say in respect to the oats that they are in themselves practically a balanced ration for your cows, but at 35 cents a bushel are considerably more costly than the rations we have been considering. If you wish to use some for variety, you could replace part of the other ration by them.

J. T. WILLARD.
Manhattan, Kas.

Managing a Winter Dairy.

To achieve the highest degree of success in the management of a dairy at any time in the year, one should know the requirements and possibilities of each individual cow. The man to whom every dairy animal is only a cow, has yet to learn the first lesson in his business. The proper beginning, then, is to know the herd with which we have to deal.

I believe October and November are good months in which to have the cows come fresh. August and September abound in flies, in short pastures, and in labor upon the farm. They, therefore, constitute an opportune season for the cow's vacation. From four to six weeks is long enough, as a rule, for the animal to rest. As she nears the period of freshening, care should be given to her ration. Since the discovery of the new air treatment for milk fever, the danger of overfeeding at this time has been largely removed. There is no other period in the life of a cow when it

is so essential that she should be strong and healthy. If pastures are good, she needs nothing better; but if they are short and brown, a small grain-ration should be added as the time of calving approaches.

The herd should be sheltered, always,

"CHEAPEST" AND "BEST" CREAM SEPARATORS

More truly is the best the cheapest in the purchase of a cream separator than in the purchase of any other farm machine. The really cheap cream separator is the one which will perform your work in the most profitable and satisfactory manner, and last the greatest number of years. Basing the value of the separator upon durability, without considering quality of work, if it lasts but two years it is worth only one-fifth of what the separator is that lasts ten years, and one-tenth of what the one is that lasts twenty years. In addition, if it loses a large percentage of cream and is difficult and expensive to operate its value is placed at even a still lower level. DE LAVAL cream separators are today admitted by every experienced user to do as near perfect work as a cream separator possibly can. Proof of this is seen in the fact that over 98 per cent of the world's creameries and all largest users employ the DE LAVAL exclusively. As to durability, the DE LAVAL has an average life of twenty years. The very best of other separators do not last over eight or ten years at the very longest, and the poorest generally become worthless in from six months to two years. At the same time these machines are incapable of doing perfect work except under ideal conditions, such as cannot possibly be had in farm use,—otherwise they lose a large percentage of the cream, are hard to operate, and in reality are but little better than gravity setting systems. It is therefore seen how little the first cost of a cream separator really means. The cost in the end is what counts. All in all considering dollar for dollar value, a DE LAVAL machine gives from five to ten times more true separator worth than any other machine on the market today. These are not mere paper claims but facts, proof of which can be had for the asking.

THE DE LAVAL SEPARATOR CO.

Randolph & Canal Sts.,
CHICAGO.
1215 Filbert Street,
PHILADELPHIA.
9 & 11 Drumm Street,
SAN FRANCISCO

General Offices:
74 CORTLANDT STREET,
NEW YORK.

109-113 Youville Square
MONTREAL
75 & 77 York Street,
TORONTO.
14 & 16 Princess Street
WINNIPEG.

Cream is Cash

—AT—

The largest exclusive Cream Butter Factory in the World

NO WAITING

NO DELAY

NO RISK

NO UNCERTAINTY

NO ANXIETY.

Cream shipped to us is paid for immediately.

Our motto is:

CORRECT WEIGHT,

HONEST TEST,

and the highest possible price for butter-fat.

Under this banner we have established an enormous business.

Through a continuation of this policy, we expect to increase our business each month.

A cordial welcome awaits every enterprising milk-producer, who appreciates having his product handled economically so as to get the greatest returns and that in cash.

It's a pleasure to answer letters. Will be glad to hear from you.

Very respectfully,

BLUE VALLEY CREAMERY CO.,

ST. JOSEPH, MISSOURI.

PEERLESS CREAM SEPARATORS

Reasons Why the PEERLESS is the best

FIRST—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.

SECOND—Compound feature, two bowls in one, hollow bowl and disk bowl combining all the features of the tubular and disk machines.

THIRD—Enclosed frame. Free from dust. Injury resulting from machine impossible.

FOURTH—Perfectly noiseless.

FIFTH—Heavy enough and strong enough to lift a box-car, which insures durability.

SIXTH—The bushings made of phosphor bronze—the most serviceable material for the purpose. Fitted and guaranteed to be accurate to 1/2 of 1-1000 of an inch.

SEVENTH—Every journal bushed with brass or phosphor bronze. This fact together with the fine adjustment described above, accounts for the light draft of the PEERLESS machine. Each bushing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at a small cost.

EIGHTH—At normal temperature the skimmed milk will always show less than 5-100 of 1 per cent butter fat and generally less than 1-100 of 1 per cent butter fat. PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.

For further information, write

Bradley, Alderson & Company

10th and Hickory

Kansas City, Missouri

Sharple's TUBULAR CREAM SEPARATORS

21 POUNDS MORE BUTTER PER WEEK

Barnesville, Ohio, June 20, 1905: We were milking ten cows May 19. That day we took a Tubular separator for trial. We used it one week and got 86 pounds of butter that week. The week before we used it, we got only 65 pounds. The week after the agent took it away we got only 64 pounds. We felt we ought to have it. Later we arranged to buy it. We recommend the Tubular to anyone interested in cows. It surely will pay for itself in a few days. (Signed) Lona and C. W. Acron. Write for catalog Y-106. It explains fully.

THE SHARPLES SEPARATOR CO.
WEST CHESTER, PA. CHICAGO, ILL.
TORONTO, CAN.

from the cold fall rains. Summer showers do no harm. In fact, they are a source of enjoyment to the cows, but the practice of leaving them out all day, and often all night, during the cold winds and rains of October and November, can not be too strongly condemned. A very important matter is to get the cows on a winter ration without a decrease in the flow of milk. This can be accomplished in but one way. It must be done so gradually, that the old cow never knows by her bill of fare where summer leaves off and winter begins. It is hard to imagine a winter dairy without a silo, and we shall not attempt it here. Begin feeding the ensilage early, in small quantities at first, giving more, of course, to the cows that are in milk. Give a small allowance of clover hay and grain, gradually increasing all as the pastures fail.

The cow that has just freshened should receive a moderate ration at first, and while no infallible rule can be given, an increase of half a pound of grain every other day until the full flow of milk is obtained, will be found to work well in the majority of cases. The amount and kinds of grains to be fed will depend upon the ability of the cow to assimilate it, and, in some degree, upon what we have at hand. However, we must balance the ration properly. To do this is always economy, providing the cow is what she should be. It is much cheaper to balance the ration ourselves than to let the cow do it for us. Suppose for example, that corn-meal is the only grain fed to a cow capable of giving 35 pounds of milk per day. From 2 1/2 to 2 3/4 pounds of protein would probably be required in the production of that amount of milk. Were she to eat 40 pounds of ensilage and 10 pounds of mixed hay, she would require about 1 1/2 pounds of protein in her grain ration. To get this from corn-meal alone she would have to eat from 20 to 22 pounds. Of course, this would be practically impossible for any great length of time. But supposing it were entirely possible, she would balance the ration by using the necessary amount of carbohydrates and voiding the rest.

Corn is king! It should have its place in the ration of the dairy cow and the fattening steer. The sum of the crop-crop always indicates with more or less accuracy the amount of pork-production; but corn alone is not a complete ration for any farm animal. The ratio of 1 pound protein to 5 or 5 1/2 pounds of carbohydrates will constitute an ideal dairy food, providing it is palatable and assimilated without too much difficulty. From 1 1/2 to 2 pounds of protein per day will be required by the cow. The amount should be determined in each individual case by the ability of the animal to turn it to profitable account in the production of milk.

Nearly all kinds of feed produced upon the farm are rich in carbohydrates, and in common practice there need be no fear of running short of this element. It should be our chief concern to provide sufficient protein, and if we must purchase it in the market, to obtain it in the cheapest form. It is often economy to sell a part of the grain raised upon the farm and purchase concentrated feeds rich in protein; that is if oats can be sold for 1 cent per pound in the market, they are expensive dairy food, because by the time they are ground and tolled at the mill, the protein in the meal will cost about 11 cents per pound. If we purchase 100 pounds of wheat bran for \$1, we have 12.6 pounds of digestible protein. If we pay \$1.25 for the same amount of gluten meal, we have from 20 to 26 pounds digestible protein. If we purchase 100 pounds of lin-

seed meal at \$1.50, we have 29 pounds of digestible protein. Just now the best brands of cottonseed-meal should be purchasable anywhere in Ohio at from \$1.20 to \$1.30 per hundredweight in carload lots; and though different samples vary widely in analysis, 100 pounds of good meal should contain over 37 pounds of digestible protein. With corn at 56 cents per bushel we can purchase only 7.9 pounds of protein for \$1. But if a hundredweight of corn be sold for \$1, and the money invested in cottonseed-meal at the rate of \$25 per ton, we have 80 pounds of the meal containing 29.6 pounds of protein, or more than 3 1/2 times the amount in a hundredweight of corn.

But cottonseed gives more satisfactory results when fed in limited quantities. From 1 to 3 pounds per day, according to the capacity of the cow, can be mixed with other grains and fed for any length of time with no deleterious results whatever. If cottonseed-meal is fed alone or with heavy grains, such as corn, rye, or pea-meal, it should be mixed with silage, if any is fed. If not, it may be fed with roots. If these are not obtainable, wheat bran, or some other bulky grain should be made a part of the ration.

A neighbor of mine with a small herd of Holsteins, feeds to each cow an average daily ration of 40 pounds of silage, 3 pounds cottonseed-meal, clover hay and cut corn-stalks ad libitum. The grain costs a trifle over four cents a day for each cow. All are doing well; in fact, they never milked better. Cornmeal and bran, equal parts by weight, are very palatable, but are not always a cheap feed. There is probably no more healthful ration than bran and gluten meal. If clover, vetch, or oat and pea hay, is fed for roughage, corn, or corn- and-cob-meal may be mixed with the bran and gluten. A cow should have no more good roughage than she will clean up. She should not be allowed to get into the habit of culling her feed. But if we succeed in the dairy business, we must have faith enough in her to give her every pound of feed she can use to advantage. We should read the dairy department in our farm papers every week. Now and then we will find an article that alone will be worth the subscription price of the paper for a number of years.

We should keep a table always at hand by which we can instantly tell the analysis of any feed ordinarily given the dairy cow. The man who succeeds, to-day, in the dairy business, must read and think, and he who will not do this must sooner or later fail, and yield his place to some one who will.—W. F. Taylor, Oceana Co., Mich., in Ohio Farmer.

Cream-Separators in Nebraska.
Within a few years Nebraska has come to be a great farm cream-separator State. According to a recent census of the Nebraska State Experiment Station, nearly 35,000 separators are in use to-day among Nebraska farmers. Without doubt this is a greater number of machines by a large majority than can be found anywhere else in a territory of this size. This universal use of the cream-separator in Nebraska speaks volumes for it as a money-making machine for the farmer. More and more each year is the farm separator becoming a big factor in the prosperity of the country. Through its introduction in many instances, large territories throughout the Middle West have been converted from practically barren wastes into prosperous farming lands. Thousands of farmers living in the corn and wheat belts who were formerly engaged in raising grain and general farming are to-day making a specialty of dairying simply because the farm cream-separator has made dairying a great deal more profitable than general farming. From Maine to California a great wave of reform in dairying and farming methods is sweeping over the country, and the cream-separator is back of it all. Cow-owners are everywhere awakening to the fact that a good cream-separator is as necessary an article on the farm as a plow. According to present indications more farm cream-separators will be sold in 1906 than ever have been in any year up to the present time.

In this connection, as an item of interest to all, the Nebraska Experiment Station authorities are quoted as estimating that from 85 to 90 per cent of the nearly 35,000 separators in use in Nebraska are the famous De Laval machines. These well-known separators are universally used in every part of the world, and in view of the exceptional efficiency and the general satisfaction they give the user it is not surprising to find that over 85 per cent of the separators in use in Nebraska are of De Laval make. A handsomely illustrated catalogue of the De Laval machines and any desired information can be had for the asking by addressing The De Laval Separator Co., 74 Cortlandt St., New York City, or any one of the Company's numerous branches.

M. G. Blackman, Hoxie, Kans., proprietor of the Great American Desert Seed establishment, has gotten out a little folder on the seed question of special interest to all farmers of Central and Western Kansas and will send it free to those sending for it. Mention the KANSAS FARMER.

The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of the Kansas Farmer. Kindly give the age, color, and sex of the animal, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should give the inquirer's postoffice, should be signed with full name and should be addressed to the Veterinary Department of the Kansas Farmer, Topeka, Kans., or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kans. If in addition to having the letter answered in the Kansas Farmer, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in Kansas Farmer."

Blind Stagers.—We have lost four horses within the past seven months. Some call it blind staggers; the third one acted as though it had staggers. In post mortem we found the stomach full of dry, hard feed, and a clot of blood on the brain. The last one that died was given a physio but did not succeed in getting the bowels to act. We found that the lungs were badly diseased, and the stomach empty; all the medicine we had given was in the large intestine with the digested food. These intestines were as large again as they should be. We found but little digested food in the small intestine. Why would the physio not go on into the small intestines? This horse seemed to want to go to the right, and would lean against something to keep from falling. These horses had been fed Kafir-corn, prairie hay, corn chop, and bran. E. M. S.

Bucklin, Kans.

Answer.—We are sending you a press bulletin describing this condition. The reason for the physio's not leaving the stomach was probably due to the fact that the intestines were too full of food.

Fistula.—I have a 6-year-old mare that has a swelling on her withers; it is 6 inches across on top. What is it and how can it be cured? It looks as though it were going to break in three places. I do not know how long it has been there; I only noticed it this morning. J. L. M.

Banner, Kans.

Answer.—I am sending you a bulletin on fistulous withers and poll evil. I fear your animal is affected with fistulous withers.

Can Not Keep Horse Without Kendall's.
Turlock, Calif., Jan. 17, 1906.

Dr. B. J. Kendall Co.
Dear Sirs:—Please send me one of your books called "A Treatise on the Horse and His Diseases." I have been using your Spavin Cure for many years and can't keep horses without it. Am at present doctoring two horses—one for spavin, the other for splint. Respectfully yours,
AARON A. ANDERSON.

Study the nature and constituents of the soil and find what crops are most suitable and plant accordingly.



YOU CAN'T AFFORD TO MAKE A MISTAKE.

Don't buy a cream separator that makes more work. Many of them do, but you need not get one of that kind. Investigate. You can try an

OMEGA Cream Separator

before you buy it. If you do not find that it is more easily washed; more easily turned; more durable than any other, we will not even ask you to keep it. You can thoroughly wash it in 3 or 4 minutes—long before the bowls of other separators are "run down." It drains itself. It does not whip the cream nor break the butter fat globules. It requires no special tools for its care. It is the real labor-saving separator. You really ought to investigate it.

Is this fair?

If you keep milk cows we will set up an Omega separator on your place, and let you try it. If you don't find that it turns more easily, is more quickly and easily washed, gives less trouble, gets all the cream, and of a finer quality than any other—you need not keep the Omega, and the trial will cost you nothing. Will it not pay you to investigate? Send for free book on "More Milk Money." Tells how to save thousands; how to make butter; how to select good cows; how to wash butter; how to avoid "white specks," and a hundred other things you ought to know. FREE if you tell how many cows you keep, give address of a neighbor who keeps cows, and mention this paper. Ask also for catalog. THE OMEGA SEPARATOR CO., 23 Concord St., Lansing, Mich.

FOR SALE

At a bargain, one Davis No. 8 hand cream separator. New. N. J. Shepherd, Eldon, Mo.

DO YOU WANT GOOD READING

?

The yearly subscription price of the following magazines is as follows:

Review of Reviews.....	\$3.00
The Cosmopolitan.....	1.00
Woman's Home Companion....	1.00
Kansas Farmer.....	1.00

Total\$6.00

We have 1,000 subscriptions for the first three to dispose of and can therefore offer the four above-named magazines for \$3 received at this office. The four must go in one set, though they can be sent to different addresses. Address

**KANSAS FARMER CO.,
TOPEKA, KANSAS.**

SAVE ALL YOUR CREAM

A hired man who doesn't milk your cows dry every milking is pretty poor dairy help at any price. Isn't that so? And in the same way a cream separator that leaves part of the cream in the milk every skimming is expensive, no matter what you pay for it. The improved

U. S. CREAM SEPARATOR

Holder of World's Record for clean skimming

takes out more cream than any other separator. This is due to the exclusive construction of its skimming device. We want to show you about this, and prove that what we say is true. The best way to do it is to have you see one of our big, handsome free catalogues. Just write us a postal and we'll send you one by return mail. Better do it now while you think of it.

VERMONT FARM MACHINE CO., BELLOWS FALLS, VERMONT
Eighteen centrally located distributing warehouses throughout the U. S. and Canada

Cleveland Cream Separator

The Only High Grade Separator Sold at a Reasonable Price.

Easy Running Because:
The Cleveland is the only all ball-bearing separator made. To compare ball-bearings with any other bearings made is like comparing a bicycle with a grind-stone.

Durable Because:
The Cleveland has the fewest parts of any separator made in the world. The fewer parts in a separator the less wear—the less repair.

Easy to Clean Because:
The fewest parts and the Cleveland skimming device made of aluminum. We were the first

to apply this wonderful metal to this use. It is non-corrosive, non-poisonous, has no coating to wear off and milk will not stick to it.

The Selling Plan:
30 days approval test in your own home under your own conditions. You don't need to take our word. Try a Cleveland, the guaranteed perfect skimmer. It won't cost you a cent to be sure. You try one in your own home without putting up one cent in advance. The new free catalog tells you how. Write for it.

The Cleveland Cream Separator Co. Dept. A, 34 Michigan Ave., N. W., Cleveland, O.

The Apiary

Different Races of Bees.

EDITOR KANSAS FARMER:—During the last several years a number of different varieties of honey-bees have been imported into the United States, such as the Cyprians, Carniolans, and more recently the Caucasians. In 1860 the Italians were introduced, and in 1864 I probably introduced the first Italian queen into the State of Indiana. I tested their merits side by side with the black, or German bees, which were the first bees brought to this country. I found the Italians superior to the blacks in the methods of defense against the bee-moth. They remained almost perfectly quiet on the combs, were gentler when being handled, and were harder. But I find that since the importation of Cyprians by queen-breeders, they have become in many cases crossed with these bees, and are much crosser when being handled than they were before thus being crossed. The Carniolans have also crept into the queen-breeding apiaries, and through crosses have increased the swarming inclinations of the Italians in many cases, which is at present one of the greatest evils that honey-producers have to contend with. None but populous colonies of bees are profitable to their owners as honey-collectors. The Carniolans, being most persistent swarmers, are on this account undesirable. The Caucasians resemble very much the common black bee, but it is claimed that they are much more docile in handling than any other race of bees known. I had a conversation with Professor Benton who has charge of the Bee-keeping Experimental Station at Washington, D. C. He is, however, absent at present, being in the far East in search of the large stingless bees found in the East Indian country. Professor Benton informed me that as far as tested, the Caucasians bid fair to become desirable bees. I have one Caucasian queen introduced late last fall, but she is mated so that her worker progeny will not prove fully what their merits may be. I will, however, try to observe as far as possible the difference, if any, in disposition from the Italians I have, but I shall not permit one of her drones to hatch out as I do not wish Caucasians crossed with my Italians at all. The drones of the queen will be pure as the fertilization of the queen does not in the least affect the purity of her drone progeny. My objection to crossing the Caucasians with the Italians is that I shall not believe them superior in any way to the Italians I now have until actual demonstration proves them so, and I will drop a word of warning to all our bee-keepers to proceed with caution in the matter of introducing the Caucasians. Also steer clear of the Cyprians and Carniolans or any strain of Italians that are very cross, as it is almost positive proof of a cross with Cyprian blood. The inclination to profuse or oft-repeated swarming shows the presence of Carniolan blood. But natural swarming is not permitted to any considerable extent in any well-managed modern apiary. Artificial swarming is practiced almost entirely for an increase of colonies. To get all there is in bees, it is necessary to have the colonies strong in numbers when the honey flow or season begins, so that there will be a force to collect and store it.

In the matter of purchasing Italian queens, caution should be used to get queens from the most reliable queen-breeders. I have no queens for sale as I am not now a breeder of queens for the market. G. BOHRER.
Rice County.

Farm Notes.

Fattening animals should never be allowed to become hungry; nor, on the other hand, should they be fed too heavily. Too heavy feeding cloy the appetite and too long periods between feeds makes the animals restless.

The potato lot should be of rich, mellow soil, plowed deep and thoroughly prepared before planting the seed. Then give clean, thorough cultivation during growth.

While it is conceded that more stock can be kept on an acre by cutting the feed than by pasturing the same acre, yet the extra labor, unless the land is very high priced, will much more than balance this.

This Custom Is Now General.

It has now become a general and also a safe rule to demand brands of goods that are well known and have a reputation for quality and reliability.

ity. Nowadays the manufacturers of good goods, inform consumers of this fact and point out that safety lies in buying the brands that bear their names and trade-marks.

In this respect the Mayer brands of shoes are deserving of special mention. Our readers have no doubt become familiar with these shoes and know of their excellent wearing quality by actual use. The Mayer factory turns out shoes suitable for every member of the family and for all uses, Sunday shoes and every day shoes, and they are known throughout the broad expanse of our land as the shoes of style and quality.

The "Honorbilt" are very popular fine shoes for men and "Western Lady" shoes embody the fit and style demanded by well-dressed ladies. For extreme comfort "Martha Washington" shoes are highly recommended. Please bear this in mind when next buying shoes.

Mail Order Banking.

Under our banking system, business men everywhere find it to their advantage to make remittances by checks, rather than by bank drafts, post office or express money orders. There are several good reasons for this, but the two principal ones are these:

(1) The convenience in paying a bill by simply writing out a check, thus making it a great time-saver as well.

(2) It gives the most satisfactory form of receipt for the payment made.

The farmer has become a business man. In the progress he has made made within the past ten years he has found it necessary, and greatly to his



GEORGE W. YORK.

LOUIS P. SCOVILLE.

profit and convenience to handle his own financial affairs, rather than trust them to the local banker, lawyer or merchant. Our agricultural colleges, farm institutes, and great conventions, that relate to agriculture in various forms, have all advocated the importance of the farmer paying more attention to the financial end of his business. Instead of being isolated from the great commercial centers, as was the case in the earlier days, he has, through the means of modern transportation facilities, rural mail routes, telephones and interurban railways, become very closely identified with these great centers. His home is his business office, and instead of spending time driving considerable distances to his local town and making expenditures for things that many times he does not want, he has brought to his home the great mail order catalogues, and when he wants to make his selection, which is usually done in conference with the whole family on a rainy day, or in the evening, he simply writes his order, encloses a check, and the mail order merchant does the rest.

A recent difficulty has arisen with reference to personal checks, because of the excessive exchange charge imposed by local banks. The local banker is usually biased in favor of the local merchant, because he is his best customer. The farmer who wants to save from 35 to 50 per cent on his purchases—which he can do through the modern mail order method of buying—finds his local bank a bank of deposit only. How much better it would be for the farmer to make his deposits in a bank in a great mail order center like Chicago. Banking by mail has become an established fact, and to keep progress with the great mail order movement, the Ravenswood Exchange Bank of Chicago, Ill., has arranged to carry farmers' accounts, allowing them to draw their checks on this bank for their purchases, which will be accepted anywhere without exchange. This will be a great convenience to farmers everywhere.

Mail order merchandising is conducted in the city of Chicago to the amount of \$200,000,000 annually.

Chicago is the greatest live stock market in the world. Many of our farmers make direct shipments to commission houses at the Union Stock Yards and receive checks in return. It can be arranged to have these checks sent to this bank for deposit to the account of the farmer without exchange charges.

Chicago is likewise the great produce center, and commission houses here are remitting millions of dollars annually to the farmers direct. By the plan proposed the farmer can have this placed to his deposit and receive the credit notice from the bank.

Chicago is also the great grain market and the same rule applies in that case.

This mail order banking proposition is best explained through the literature the Ravenswood Exchange Bank, of Chicago, Ill., will send to any one asking for it.

The Ravenswood Exchange Bank is composed of men who have had agricultural experience and are familiar with the requirements of the farmer along banking lines. The president, Mr. Louis P. Scoville, under whose direct supervision the mail order business is conducted, is a director in White's Class Advertising Co., an advertising agency that handles extensively agricultural advertising accounts, and is thus placed in close touch with the great consuming interests of the country.

Mr. George W. York, a director of the bank, is also treasurer of White's Class Advertising Co., and has had more than twenty years' experience in business lines directly affecting important branches of agriculture. He is publisher, likewise, of the American Bee Journal, the oldest bee paper in

GET THE BEST—TOWERS' SURFACE CULTIVATORS
for corn, kafir-corn, cotton, tobacco, sorghum, potatoes, beets and other vegetables.

THREE SIZES: for two rows or one row—three horses, two horses or one horse. Kill the weeds; nurture the roots of growing plants; preserve moisture; cause full filling of grain; increase yield ten per cent and up. **FREE** Treatise on Surface Cultivation. Introductory prices where we have no agents.

J. D. TOWER & SONS CO., 14th St., MENDOTA, ILL.

Topeka Business College

The school that educates you for business success and that always gets you a good position. Students enroll at any time. Work for boards if you wish while attending school. Competent persons always in demand at good salaries. 104-page catalogue free—mention this paper.

DEPARTMENTS:
Bookkeeping
Shorthand
Civil Service
Telegraphy
Penmanship

L. D. Strickler

TOPEKA BUSINESS COLLEGE, Topeka, Kans.

JUST ISSUED

Farm Grasses of the United States

By W. J. SPILLMAN

Agrostologist, U. S. Department of Agriculture

An intensely practical discussion of the farm grasses of the United States of America is presented in this volume. It is essentially a resume of the experience of American farmers with grasses, and it is safe to say that no other work has covered the ground so thoroughly. No attempt has been made to give a connected account of all the grasses known in this country, but the aim has been rather to give just the information which a farmer wants about all those grasses that have an actual standing on American farms. The whole subject is considered entirely from the standpoint of the farmer. One of the most valuable features of the book is the maps, showing, at a glance, the distribution of every important grass in the United States; and the reasons for the peculiarities in this distribution are fully brought out. The principal chapters treat on the grass crop as a whole and the relation of grass culture to agricultural prosperity, meadows and pastures, the seed and its impurities; the bluegrasses; millets; southern grasses; redtop and orchard grass; bromes grasses; grasses for special conditions; haying machinery and implements; insects and fungi injurious to grasses, etc., etc. The methods followed on some pre-eminently successful farms are described in detail, and their application to grass lands throughout the country is discussed. The discussion of each grass is proportional to its importance on American farms.

This book represents the judgment of a farmer of long experience and wide observations regarding the plan in agriculture of every grass of any importance in American farming. In its preparation its use as a text book in schools as well as a manual of reference for the actual farmer has constantly been kept in mind. The book is most conveniently arranged and splendidly indexed, so that the reader may find any subject at a glance.

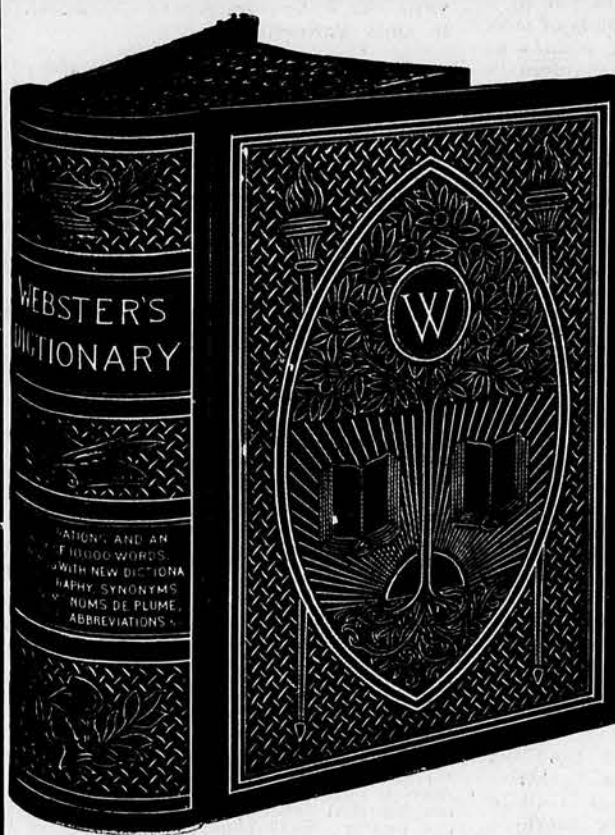
Illustrated, 6x7 inches. 248 pages. Cloth. Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA,

KANSAS

OUR GREAT DICTIONARY OFFER.



**New
Census
Edition**

**Full
Sheep
Binding**

**Thumb
Indexed**

Regular Price, \$9.00

We are now enabled to offer our readers This Great Work and the Kansas Farmer for one year for only

\$2.75

Send Cash or Money Order to

Kansas Farmer Co., Topeka, Kans.

America, with which he has been connected for twenty-two years.

Mr. Frank B. White, president of White's Class Advertising Co., who is well known by the agricultural fraternity because of his long service in connection with the advertising business, always a specialist in agricultural lines, has this to say about this plan intended for farmers to conduct their banking by mail:

"I most heartily approve of the plan proposed by the Ravenswood Exchange Bank to conduct a banking business by

mail, particularly in behalf of farmers. Both Mr. Louis P. Scoville and Mr. George W. York are interested in my company, and I know them to be thoroughly competent, honorable, safe and conservative. I am also acquainted with the vice-president, Dr. W. C. Abbott, whom I know to be a successful publisher and manufacturer, and who has recently become interested in this splendid institution. I am sure that the plan they propose is going to be of great advantage to the farmers everywhere, because of the convenience and

saving, and furthermore, because of the interest to be paid on deposits, all of which they explain in their literature."

Passengers east from Chicago to Fort Wayne, Findlay, Fostoria, Cleveland, Erie, Buffalo, New York City, Boston, and all points east, will consult their interests and find advantage in selecting the Nickel Plate road east from Chicago. Three through trains are run daily, with through day-coaches to New York City, and modern Pullman sleeping-cars to destination. Rates always the lowest, and no excess fares are charged on any train, for any part of the journey. Modern dining-car service, with individual club meals, ranging in price from 35 cents to One Dollar; also meals a la carte. Ask for tickets via the Nickel Plate Road. Chicago depot, La Salle and Van Buren Streets, the only station in Chicago on the Elevated Loop. Chicago City Ticket Office, 111 Adams Street. Detailed information may be secured by addressing John Y. Calahan, General Agent, No. 113 Adams St., Room 298, Chicago.

The Fairbanks-Morse Company is always progressive. In order to meet a demand from up-to-date farmers, it has lately devised and put upon the market an electric-light and power plant to be run by its gasoline engines and especially adapted for farmers' use. This plant is arranged to light the house and farm-buildings, or to be applied as power, in pumping, sawing wood, feed-grinding and other farm-work where power is needed. This firm has lately sent Prof. B. F. Eyer, of the department of physics and electrical engineering of the Kansas Agricultural College, two machines of this type to be tested. One of these is a nine horse-power, gasoline electric machine and the other is of two horse-power. When these machines have been thoroughly tested, the KANSAS FARMER will publish results.

Quick Meal Chick Feed is a dry feed in which there is practically no waste. It contains cracked and broken grains of all sorts. Millet, rape, and other small seeds, beef, bone and grit, charcoal and other choice ingredients and does not induce over-gorging or clogging, but tends to produce rugged, hardy chicks, always ready for their ration. Yes, it contains some grit because grit is just as necessary to the chicken as teeth are to other animals. They need the grit to digest their feed and this is admitted by every known authority on chicken feeding. The Steinmesch Co. has issued a neat booklet which explains the advantage of using this valuable feed, and may be had by addressing Steinmesch Feed & Poultry Supply Co., St. Louis, Mo.

Grain in Kansas City.

Receipts of wheat in Kansas City yesterday were 91 cars; Saturday's inspections were 31 cars. The larger offerings and weak future markets made carlots sell slowly. A few cars of choice milling wheat brought steady prices, but the remainder averaged 10 lower. The sales were: No. 2 hard, 1 car choice yellow 82c, 1 car 77½c, 3 cars 77c, 1 car 76½c, 1 car 76½c; No. 3 hard, 1 car 75½c, 3 cars 75c, 2 cars 74c; No. 4 hard, 1 car 68c, 1 car 67½c, 1 car 67½c, 1 car 64c; rejected hard, 3 cars 64c; No. 2 mixed, 1 car 80c; No. 3 mixed, 1 car 77c; No. 4 mixed, 1 car 64c, 1 car 62½c; No. 2 red, 2 cars 94c; No. 3 red, nominally \$6@91c; No. 4 red, 1 car 87c, 1 car 85c, 1 car 83c.

Receipts of corn were 54 cars; Saturday's inspections were 16 cars. Carlot arrivals were large enough to depress prices about ½c. The demand was moderate. The sales were: No. 2 white, 5 cars 42½c; No. 3 white, 10 cars 42c; No. 2 mixed, 3 cars 41½c, 3 cars 41½c; No. 3 mixed, 7 cars 41½c; No. 2 yellow, 4 cars 42c.

Receipts of oats were 29 cars; Saturday's inspections were 7 cars. There was a fair demand, and prices held up well considering the increased offerings. Sales were made as follows: No. 2 white, 4 cars 32c, 1 car 31½c; No. 3 white, 1 car 31c, 2 cars 30½c, 1 car color 30½c; No. 4 white, 1 car 30½c; No. 2 mixed, nominally 30@30½c; No. 3 mixed, 1 car 29½c; No. 4 mixed, 2 cars 29½c. Barley was quoted 39@40c; rye, 56@58c; kafir-corn, 65@66c per cwt.; bran, 86@88c per cwt.; shorts, 90@95c per cwt.; corn chop, 80@82c per cwt.

Kansas City Live Stock Market.

Stock Yards, Kansas City, Mo. Monday, March 26, 1906. An unusually heavy proportion of beef steers were included in the cattle supply last week, and the market on that class was lower Tuesday and Wednesday, but regained strength Thursday and Friday, closing the week with only a small loss. Circulars were sent out announcing a decline of 15@25c, but best authorities declare that prices for the week averaged only a shade under previous week, and closed up right at the highest point of the winter. At the worst time, light steers sold nearly steady, main weakness being shown on heavy cattle. Cows, heifers, and bulls continue scarce and stronger, and stockers and feeders took a spurt upward on account of the very small supply offered, rather than any improvement in condition of country roads, feed lots or pastures.

The cattle run to-day is 10,000 head, same as last Monday. The run last week was 38,100 head, smallest week this year. Market is steady on beef steers to-day, butcher cattle strong, also stockers and feeders in better demand. The rain last night, and warmer weather this week will soon settle the mud, and a sharp trade in country grades is looked for this week. The top steers last week sold at \$5.75, top to-day \$5.80, bulk of steers \$4.60@5.25, very few steers below \$4.50, top heifers \$5.15, most of the good heifers \$4.35@4.75, top cows \$4.65, bulk \$3.25@4.25, bulls \$3.25@4.25, veals up to \$7 again, stockers and feeders mostly at \$3.40@4.50, a few cattle both below and above these prices, fancy feeders \$4.90@5. The hog market continues to be the

KANSAS FARMER.

Established in 1868.

Published every Thursday by the
Kansas Farmer Co.,
Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

ADVERTISING RATES.

Display advertising, 30 cents per line, agate (fourteen lines to the inch). Continuous orders, run for the paper, \$1.82 per inch per week. Special reading notices, 30 cents per line. Special rates for breeders of pure-bred stock. Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order. Electrotype must have metal base. Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price. To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All new advertising orders intended for the current week should reach this office not later than Monday. Change of copy for regular advertisement should reach this office not later than Saturday previous to publication. Every advertiser will receive a copy of the paper free, during the publication of the advertisement. Address all communications to

KANSAS FARMER CO.,

116 West Sixth Ave., - Topeka, Kans.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

HOLSTEIN—Bull calves 6 and 10 months old—good ones. H. B. Cowles, Topeka, Kans.

REGISTERED Aberdeen-Angus cattle for sale. Fifteen bulls from 10 to 20 months old; 15 heifers from 1 to 2 years old; 15 heifers from 2 to 3 years old; 25 cows some with calves at side. I am making farmers prices on all or a part of the above cattle as I do not have room for them this summer. Heather Eclipsen 38761 in service. A. L. Wynkoop Bendena, Kans.

FOR Red Polled bulls or heifers write to Otto Young, Utica, Kans.

FOR SALE—Holstein-Friesian bull calves. Address Hughes & Jones, Route 2, Topeka, Kans.

FOR SALE—Registered Hereford bulls, 18 to 24 months old, by Prime Rupert 4th; also car high grade yearling bulls. Duff & Sons, Horton, Kans.

RED SHORTHORN BULL for sale. A. C. Rait, R. R. 4, Junction City, Kans.

FOR SALE—One registered double-standard Polled Durham bull, 2 years old in March, 1906, colored red. Will consider trade for females of the same class of stock. Address Jacob J. Yoder, Haven, Kans. R. 2.

GALLOWAY BULLS—4 head, 16 to 18 months old, suitable for service. All registered. Address C. A. Kline, R. F. D., Tecumseh, Kans.

SELDON STOCK FARM OF SHORTHORN CATTLE Our herd was established 18 years ago in Iowa. In our herd are such families as Young Mary, White Rose, Pomona, Secret, Arabella, Lady of Athol, Dulcibella, Young Phyllis, etc. We have only four young bulls left. Write us for prices. HOADLEY & SIGMUND, Selden, Kansas. Mention Kansas Farmer.

scene of a fierce conflict, but since provisions have gotten up so high the market shows more life and less resistance from the packers. Pork has passed the \$16 mark, and Saturday's hog market was the best of the year, top \$6.37½. Market is 5c lower to-day, top \$6.32½, bulk \$6.20@6.30, supply 6,000. It is believed the market will break as soon as shipping conditions become normal in the country, because of the big runs then.

Sheep and lambs weakened 10@15c last week, although receipts were moderate at \$1,400 head. Supply to-day is 16,000, market 5@10c lower, lambs selling at \$5.80@6.40, wethers and yearlings \$5.35@5.75, choice yearlings would bring \$5.90, ewes \$4.25@5.25. Some 53-pound lambs sold at \$5.30 for the country last week, and some partly finished lambs, 67 pounds, were taken out at \$6. J. A. RICKART.

South St. Joseph Live Stock Market.

South St. Joseph, Mo., March 26, 1906. The receipts of cattle for the opening market of the week were considerably lighter than on the corresponding day of last week. The local supply falling off about 800, while receipts at five leading points show a decrease of 11,000. Of the receipts at this point, the bulk were light and light medium weight steers, there being no fully fat weighty beeves on offer. Buyers for some days have considered local prices for these light and medium weight steers higher than at outside points, and with today's receipts running largely to this kind they commended and were able to secure a reduction of around 10c on the bulk of offerings. In fact, about the only cattle to sell steady were light weights that were cheap enough in prices to compete in the feeder trade. There was some inquiry for weighty cattle such as has been selling at \$5.35 5.50 and these kinds would have sold about steady had they been here, for the bulk of steers prices ranged from \$5.15 down. There were not enough cows and heifers here to supply the demand, and prices were fully steady to strong, some good, handy weight fed Oklahoma steers yarded in quarantine division not a ready outlet at \$4.20@4.60, with the bulk at the latter price. Stock steers and feeder were in good strong request, and the limited supply

CATTLE.

FOR SALE—One roan and two red yearling registered Shorthorn Bates bulls. Splendid individuals. C. G. Cochran & Sons, Plainville, Kansas.

RED POLLED BULLS—Five bulls 9 to 12 months old, for sale cheap. Nice ones, registered. H. L. Pellett, Eudora, Kansas.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgwick County, Kans.

FOR SALE—Registered Galloways. Bulls, cows and heifers, singly or in car lots. Dean Bartlett, St. Marys, Kans.

PEDIGREED SHORTHORN BULL 3 years old; sire Magenta, who cost \$1,000 at 8 months. Cheap. S. J. Rents, Leavenworth, Kans.

CHOICE registered Shorthorn bulls and heifers, cheap. M. C. Hemenway, Hope, Kans.

FOR SALE—The pure Cruickshank bull, Violet Prince No. 145647. Has been at the head of our herd as long as we could use him. An extra animal. H. W. McAfee, Topeka, Kans. 2 miles west of Kansas Ave. on Sixth street road.

FOR SALE—Registered Jersey cattle. Two yearling bulls. Sires—A son of Bessie Lewis, 82 lbs. butter 7 days, and "Financial Count" (imported); granddam held Island butter record 3 years. Sire's dam holds public milk record of 58 pounds daily, and his dam and Island winner in class for two years. Her four dams 22 to 26 quart cows, and all winners. Sayda Polo Jersey Farm, Parsons, Kansas.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Collie puppies. Dr. J. W. Perkins, 422 Altman Bldg., Kansas City, Mo.

HORSES AND MULES.

FOR SALE—Or will trade for a good span of 3- or 4-year-old Percheron mares—a good jack coming 7 years old, a good breeder and the best dispositioned jack I have ever seen. Will take \$200 cash if taken soon. I also have two thoroughbred Duroc-Jersey boars, \$15 each. E. G. Williamson, Edwardsville, Ka.

FOR SALE CHEAP—Fine young trotting-bred stallion, by Flood Wilkes. J. E. Brechbill, Detroit, Kansas.

FOR SALE CHEAP and must be sold—Two stallions, one black registered Percheron, sound and good, weight 1,700 pounds; one dark brown coacher, sound and good, weight 1,300 pounds. One clipping machine, can be run by engine, motor, or by tread power. Dr. Hugh S. Maxwell, Salina, Kansas.

FOR SALE OR TRADE—For stock cattle, two Jacks coming 3 years old, 15½ hands high; weight 950 pounds; also one 4 year old Jack 14 hands high. Good performers. Also pacing-bred stallion by Silkwood, 16½ hands high, weight 1,250 pounds. Address J. C. Hentzler, R., Topeka, Kans.

FOR SALE OR TRADE—One good black jack, with white points, 15½ hands high, 7 years old, a good individual and a good breeder, will exchange for good dairy or pure-bred beef cattle. Address John L. Stanley, Nyhart, Bates Co., Mo.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

LEAVENWORTH COUNTY Jack Farm, 10 head of Jacks and Jennets for sale. Corson Brothers, Potter, Kans.

FOR SALE—Registered French draft and Percheron stallions, mares and colts; bays, browns and blacks. One gray stallion, 13 years old, sound and sure. Jake Howald, Hoyt, Kans.

LOST OR STRAYED—Brown mare, weight 1,100 pounds, white spot in forehead, barb wire cut on side, somewhat awaybacked. Suitable reward for return. J. W. Gillard, 886 Highland Ave., Topeka, Kans.

SEEDS AND PLANTS.

AN UPLAND CRANBERRY AT LAST—Grows on dryest grave or sandy soil. No costly bog or water required. Richest in flavor. Enormous crop per acre. Outsets the Cape Cod cranberry by 25 per cent. Safe and sure in any climate. Send postal for booklet. W. S. Robinson, Buckfield, Maine.

PLANTS—Bulbs, shrubs, evergreens, roses, etc. Strawberry plants per 100, 35c; 1,000, \$2.25. Raspberry, 100, 70c; 1,000, \$6. Blackberries, 100, 70c; 1,000, \$5. Grape, 2 year, 5c. Currants and gooseberries, per 10, 50c. Asparagus, 100, 40c; 1,000, \$2.25. Rhubarb, 10, 30c; 100, \$2.25. Gladiolus bulbs per 10, 10c; 100, 75c. Dahlias, per dozen 75c. Hardy herbaceous plants, greenhouse plants, etc. Price list on application. Bonner Spring Nurseries, Bonner Springs, Kans.

SIXTY-DAY OATS—Re-cleaned, \$2.00 per 100 lbs. sacked. C. E. Cheney, Manchester, Kans.

FOR GOOD SEED—Speltz, re-cleaned and fanned by hand. Write Adams & Walton, Osage City, Kan

ONE DOLLAR will buy enough of McCauley's white seed corn to plant seven acres if you send to A. J. Nicholson, Manhattan, Kans.

SMALL FRUIT PLANTS—For price list, which also contains a full description of the prize strawberry, Cardinal, send to Wm. Brown & Son, Route 9, Lawrence, Kans.

FOR SALE—Spring of 1906 seed sweet potatoes six kinds. Price on application; also a fine lot of eating sweet potatoes. I. P. Myers, Hayesville, Kans.

SEED CORN—"Hildreth yellow dent easily ranks first as the best producing variety"—Bulletin 123. Won three first premiums at Topeka and Hutchinson State Fair 1905. At the Kansas State Corn-breeders' contest 1906, Won 1st and 2d prizes for the most productive acre—103 and 78½ bushels. Write C. E. Hildreth, corn-breeder and grower, Altamont, Kans.

was quickly absorbed at steady to strong prices.

The moderate supply of hogs was made up of the best quality seen here in the last two or three weeks. The demand was pretty good, but with Chicago having nearly 60,000 and reporting a big break, sellers here were compelled to accept the decline at right at 5c compared with last week's closing figures, the bulk selling at \$6.20@6.27½ with top at \$6.30. These prices are considerably higher than a week ago, and the market appears to be in very good condition.

The receipts of sheep were fairly liberal, although not nearly as large as a week ago. The five markets reported less than 5,000 less than last Monday, the demand was quite good, and with quality running better than it did on the closing days of last week, the market showed quite lively movement with prices steady to strong, best lambs selling at \$6.45, with bulk at \$6.25@6.40, and good fat ewes sold at \$5.25 and were considered strong. The market is hardly in condition to stand a repetition of the enormous receipts of last week. WARRICK.

SWINE.

FOR SALE—20 good strong spring and yearling Berkshire boars that are just what the farmers want. Prices right. Address E. W. Melville, Eudora, Kansas.

POULTRY.

BLUE BIRDS—Barred to the skin. Hawkins-Ringlet strain. Eggs, \$1 per 15, \$5 per 100. Minnie K. Clark, Lyndon, Kansas.

LIGHT BRAHMA EGGS from prize-winning birds, \$1.25 for 15; \$2 for 30; \$2.50 for 45; \$5 for 100. Carefully selected. N. Van Buskirk, Blue Mound, Kansas.

EGGS FOR HATCHING from my flock of pure-bred B. F. Rocks. Pullets scoring 93; flocks headed by males scoring from 90½ to 92½. \$1.25 per 15—\$5 per 100. Incubator orders a specialty. Eggs carefully packed. Address Mrs. Chas. Ainsworth, Eureka, Kansas, Route 1.

HELP WANTED.

WANTED—Man to milk 25 cows and separate cream. Will pay \$25 per month, steady job to the right man. Miller Bros., The 101 ranch, Bliss, O. T.

FARM and ranch hands furnished free. Western Employ Agency, 704 Kansas Ave., Topeka, Kans.

MISCELLANEOUS.

PRIVATE DEMONSTRATORS—Men and women for every county in Kansas. Same route each year. Salary and bonus. Address J. C. Messinger Co., Bethlehem, Pa.

WANTED—A good second-hand separator. Dr. Barker, Chanute, Kansas.

AMERICAN HERBS Cure acute and chronic diarrhoea. Used many years by a successful New York physician. 25 cents a package. M. B. Noble, 70 Bostwick St., Grand Rapids, Mich.

GOOD DAIRY BUSINESS and route for sale or trade (only route in county seat); business amounts to five thousand yearly. Address D. S. Burnham, Minneapolis, Kans.

SPECIAL ADVERTISING OFFER—Send your photo, any style, bust, or full figure, alone or in group, with 70 cents in stamps or money order and receive fifteen dainty miniature cabinet photos mounted on pretty, new style folder cards, size about 3½x5 inches, copied separately in bust form from your picture. Original photo returned and copies guaranteed perfect reproductions. Don't miss this special offer. Hit of the season. If more than 15 wanted add 4 cents for each additional print. Cash must accompany order. Address E. R. Gregg, Gregg's Studio, Emporia, Kans.

STRAYED OR STOLEN from my farm 2 bay horses, weight about 14 or 15 hundred pounds, one with blaze face, glass eyes, feet white; other, one hind foot white, patch of hair off right jaw. Suitable reward for return. Allen Flesch, Route 1, Garfield, Pawnee County, Kans.

ENSILAGE CUTTER—For sale a nearly new Smalley cutter, self feed, 10 ton capacity per hour. Will sell at a bargain. Address E. W. Adams Berryton, Kans. Topeka Independent phone 5502

WANTED—At once sound young men for firemen and brakemen on railways; high wages; promotion; experience unnecessary; instructions by mail at your home; hundreds of good positions now open. Write National Railway Training Association, 620 Paxton Block, Omaha, Neb.

EARN FROM \$7.50 to as high as \$155.50 per month. Wanted—400 young men and sound men of good habits to become brakemen and firemen. Big demand in Wyoming, Nebraska, Kansas, Colorado, and Missouri. Instructions sent by mail; stamp for reply. Northern Railway Correspondence School, Room 202 Skyes Block, Minneapolis, Minn.

LADIES—To do piece work at their homes. We furnish all material and pay from \$7 to \$12 weekly. Experience unnecessary. Send stamped envelope to Royal Co., Desk 49, 34 Monroe St., Chicago Ill.

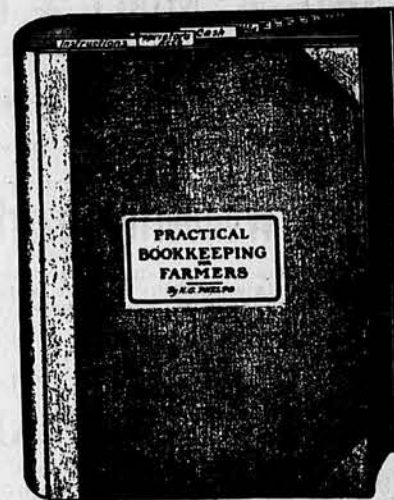
Stray List

Week Ending March 15.

Sheridan County—Miles Gray, Clerk. PONY—Taken up by Miles F. Riley in Prairie Dog tp., April 14, 1905, one black female pony, weight 700 to 800 pounds, blaze face and 2 white hind feet.

Week Ending March 20.

Elk County—J. L. Logsdon, Clerk. STEER—Taken up by John Chamberlain, in Paimterhood tp. (P. O. Longton), Nov. 10, 1905, one red muley steer, 2 years old, silt and crop off under part left ear; valued at \$25.



The farmer's guide to success in farming. 200 pages 10x13 inches. 20 pages of instructions and illustrations. A full set of farm accounts worked out. The remainder of the book for use in keeping accounts. The results of a whole year's business are shown on one page which will show the farmer the cause of success or failure. Will last the average farmer three years. Price \$3.00. For a short introductory period the price will be \$1.00 delivered. Descriptive circular and testimonials free. Send us ten 2-cent stamps and we will mail you our latest book—a 50-page book on Business Writing and Lettering; or we will send you both books for \$1.15, regular price \$1.40. Address E. G. Phillips & Co., Eudora, Mo.

REAL ESTATE

**Canadian Pacific
Irrigation Colonization
Co., Ltd.
Calgary, Alberta, Canada.**

Shade Trees for the Home.

(Continued from Page 355.)

place, particularly for city and town planting. With the use of fertilizers it can be crowded to an annual growth of three to five feet in height and an annual increase in diameter of at least an inch.

The American Linden with little care grows in good form, giving trees of large size, symmetrical head and great beauty. The sycamore may also be planted.

The Carolina poplar is oftentimes planted on real-estate additions where very speedy results are desired. This tree can be pushed to the growth of four to eight feet in a season and will make a large-sized tree in less time than any other.

If judiciously trained, the soft maple will give satisfactory results. Those who are willing to wait longer and give more time may plant the Norway and sugar maples.

The Catalpa speciosa grows with rapidity and transplants with great ease and certainty. Its mass of bloom is particularly attractive in June. By reason of its fleshy roots it can be transplanted when of large size. It has no insect enemies and can be planted with confidence.

Some varieties of trees may be used to advantage in grouping. The white birch contrasts in a pleasing way with trees of darker bark. The brilliant bloom of the redbud, appearing before the leaves, makes a tree very desirable for early spring.

The oak-leaf mountain ash never attains very large size. It may be used as a specimen tree, standing alone, or as one of a group. An occasional tree of the honey-locust may be used. The writer remembers a very symmetrical tree of this variety planted on the grounds of the late J. Sterling Morton, at Nebraska City. Its fine foliage makes this tree attractive. The cut-leaf, weeping birch is occasionally planted in sheltered grounds, and where conditions are favorable this choice tree gives satisfaction.

The hackberry is indigenous to Central and Western Nebraska. The foliage endures the coal smoke of town. The tree carries rather more foliage than the elm and is well suited to Western Nebraska.

PLANTING.

In our climate it is better to plant in early spring. The very best time to transplant any tree is just as the sap is moving and the buds swelling. At this time new rootlets are quickly formed, assuring continued supply of sap.

In preparation for planting it is well to stake out the grounds for planting, so that each tree when planted may fit in as a part of the whole. It is well to dig the holes a foot deeper than would naturally be required by the size and amount of roots. In width, the hole should be a foot wider each way than the roots of the tree extend. In refilling the hole, secure well-aerated surface soil and the more fertile the better. The tree should be planted four to six inches deeper than it grew in the nursery row. After the tree is solidly planted and earth has been filled in and tramped four inches above the roots, add two or three pails of water, or enough to saturate the soil. Then fill in two or three inches of very fine, old manure, that which has rotted for years is best suited to this work. The first office of this application is to increase the fertility of the soil. The second is, it acts as a mulch, lessening the evaporation of moisture. Over this fill to surface level, and either leave and keep the surface loose by frequent cultivation, or mulch to the width of six to eight feet about the tree. Since the tree in transplanting suffers considerable loss of root, it is quite important that this should be partially balanced by judicious cutting back of top.

In order to shape a shade-tree so it will not break down during a storm, it should be remembered that a tree, with a straight, central trunk from which the side branches spread out horizontally, will not split down. A forked tree with two nearly equal branches may split off one. To correct the fork remove one branch, watching for other forks during the growth of the tree. In trimming shade-trees of considerable size, do not cut back to bare poles with short stubs of limbs. Leave a considerable number of small branches, twigs, and buds that shall expand and help to use the natural circulation of the sap.

TRUNK PROTECTION.

Since trees of all kinds while growing in nursery row, or for that matter in timber, have the trunks closely shaded, the bark is sensitive to the ex-

treme power of sun and wind. It is therefore important to completely wrap the trunks of trees at planting time to lessen the evaporation. In case of very large trees this is usually done with rope twisted from hay or straw. With smaller trees wrapping burlap will be sufficient. This suggestion is of very great importance. It lessens the effect of the sun and wind and is likely to guard against the attack of injurious insects.

EVERGREENS.

Evergreens may be used as shelter-belts or in groups and occasionally in single specimens. They transplant to best advantage if moved just as the buds are swelling. This varies with different varieties. The pine family may be transplanted in the first half of April.

The red cedar will do better if not moved until late April or early May, and should the season be cold and backward perhaps even later, watching for the time when the buds are swelling and new rootlets would be most quickly pushed forward to support the transplanted tree.

In the transplanting of evergreens it is found advantageous to water the ground where they stand quite freely before removal. Allow the trees to drink and fill themselves for a day or two before transplanting. In this way they store up moisture enough to materially assist them in overcoming the shock of removal. Since the evergreen tree is always in leaf, more care is required in transplanting than in handling a deciduous tree which is usually transplanted when not in leaf.

It is of the utmost importance to protect the roots of evergreens from exposure to sun or wind. Since the evergreen sap is resinous in character, it very rapidly sets or hardens and does not liquify or start afterwards. A few minutes exposure of the roots of evergreens to sun or drying wind is usually equivalent to the loss of the tree, although the tree may look well for some days or weeks thereafter.

Fruit Prospects.

Reports on fruit conditions from about forty counties received by Secretary W. H. Barnes of the State Horticultural society, indicate that the prospects at the present time are equally as good as they have been at this season at any time in recent years.

With the exception of peaches, fruit is in good shape. Peaches in many counties have been damaged by cold weather and in some counties are dead.

The report by counties reads: Bourbon—Small fruits not hurt. Sedgwick—Hurt a little; not bad. Barber—No harm to speak of. Jefferson—Condition still good. Jackson—Half of tender peaches dead; prospects still good. Douglas—Tree fruit still safe. Sumner—Fruit still safe. Geary—Fruit still safe. Wyandotte—No damage; best prospect for years.

Marion—Some apricots and plums hurt; other fruit all right. Shawnee—Plums, some killed; peaches, Elberta and Crawford, 90 per cent killed; Amsden, Crosby, Early Rivers and hardy seedlings all right; grapes good; pears, Kiefer hurt, Seckel all right; apples all right.

Franklin—Nothing hurt but a few peaches.

Wabaunsee—Everything in good shape except apricots.

Montgomery—Prospects never better. Kearny—Everything safe except a few apricots and peaches.

Butler—Prospect good. Leavenworth—Fruit prospects fine.

Osborne—Crop is uncertain. Nemaha—Prospects good; no damage.

Riley—Peaches, Elberta mostly dead; Family Favorites and seedlings, half of buds alive; grapes and small fruits show a prospect for a full crop.

Allen—No dead peach-buds; other fruits in best of condition.

Brown—Prospects for good crop general.

Johnson—No fruit killed and prospects good.

Russell—Peaches damaged some, but enough live buds left to insure a good crop. All other fruit in good shape except apricots.

A queer method of fishing is used by the Chinese. The fisherman lets down from the side of the boat a screen of white canvas. The shoal of fish mistake this for some floating obstruction and try to leap over it, with the result that the fish jump in the boat and are thus captured. This method is employed by Malays in their waters.

MIDDLE LIFE

A Time When Women Are Susceptible to Many Dread Diseases—Intelligent Women Prepare for It. Two Relate their Experiences.

The "change of life" is the most critical period of a woman's existence, and the anxiety felt by women as it draws near is not without reason.

Every woman who neglects the care of her health at this time invites disease and pain.

When her system is in a deranged condition, or she is predisposed to apoplexy, or congestion of any organ, the tendency is at this period likely to become active—and with a host of nervous irritations make life a burden. At this time, also, cancers and tumors are more liable to form and begin their destructive work.

Such warning symptoms as sense of suffocation, hot flashes, headaches, backaches, dread of impending evil, timidity, sounds in the ears, palpitation of the heart, sparks before the eyes, irregularities, constipation, variable appetite, weakness, inquietude, and dizziness, are promptly heeded by intelligent women who are approaching the period in life when woman's great change may be expected.

Lydia E. Pinkham's Vegetable Compound was prepared to meet the needs of woman's system at this trying period of her life. It invigorates and strengthens the female organism and builds up the weakened nervous system.

For special advice regarding this important period women are invited to write to Mrs. Pinkham at Lynn, Mass., and it will be furnished absolutely free of charge. The present Mrs. Pinkham is the daughter-in-law of Lydia E. Pinkham, her assistant before her decease, and for twenty-five years since her advice has been freely given to sick women.

Read what Lydia E. Pinkham's Compound did for Mrs. Hyland and Mrs. Hinkle:

Dear Mrs. Pinkham:—

"I had been suffering with displacement of the organs for years and was passing through the change of life. My abdomen was badly swollen; my stomach was sore; I had dizzy spells, sick headaches, and was very nervous.

Lydia E. Pinkham's Vegetable Compound Succeeds Where Others Fail.



Mrs. A.E.G. Hyland

"I wrote you for advice and commenced treatment with Lydia E. Pinkham's Vegetable Compound as you directed, and I am happy to say that all those distressing symptoms left me and I have passed safely through the change of life, a well woman. I am recommending your medicine to all my friends."—Mrs. Annie E. G. Hyland, Chester-town, Md.

Another Woman's Case

"During change of life words cannot express what I suffered. My physician said I had a cancerous condition of the female organs. One day I read some of the testimonials of women who had been cured by Lydia E. Pinkham's Vegetable Compound, and I decided to try it and to write you for advice. Your medicine made me a well woman, and all my bad symptoms soon disappeared.

"I advise every woman at this period of life to take your medicine and write you for advice."—Mrs. Lizzie Hinkle, Salem, Ind.

What Lydia E. Pinkham's Vegetable Compound did for Mrs. Hyland and Mrs. Hinkle it will do for other women at this time of life.

It has conquered pain, restored health, and prolonged life in cases that utterly baffled physicians.

Lydia E. Pinkham's Vegetable Compound Succeeds Where Others Fail.

Barn Plans and Outbuildings

New, revised and greatly enlarged edition, Modernized and brought up-to-date

EDITED BY EDWIN C. POWELL

A reliable guide to those intending to build new barns or to remodel old farm buildings for any and all purposes.

The proper and economical erection of barns and outbuildings requires far more forethought and planning than was ordinarily given to their construction. But with modern ideas, proper appreciation of sanitary conditions, and the use of labor-saving implements, a barn that twenty-five years ago was considered perfect would not meet present requirements.

Outline of Contents:

After an introductory chapter on the general rules to be observed in barn building, special chapters give detailed information and illustrations on

GENERAL FARM BARN
CATTLE BARN AND STABLES
DAIRY BARN
CATTLE SHEDS
SHEEP BARN AND SHEDS
PIG BARN
POULTRY HOUSES
CARRIAGE HOUSES AND HORSE BARN
CORN HOUSES AND CRIBS
ICK HOUSES

ICE HOUSES AND COOL CHAMBERS
DAIRY HOUSES
CRAKERS AND CHEESE FACTORIES
SPRING HOUSES
GRANARIES
SMOKE HOUSES
DOG KENNELS
SILOS
ROOT CELLARS AND ROOT HOUSES
BUILDINGS OF VARIOUS KINDS, ETC., ETC.

All descriptions and directions contained in this volume are given in so plain and clear a manner as to be readily understood by anyone. Every professional builder, and every person, be he farmer or otherwise, who intends to erect a farm building of any kind, can, in this book, secure a wealth of designs and plans for a very small sum.

With 375 illustrations, 5 x 7 inches, 404 pages.

Cloth, price, postpaid, \$1.00

THE KANSAS FARMER CO.

TOPEKA, KANSAS

DUROC-JERSEYS.

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS—Large-boned and long-bodied kind. A fine lot of bred gilts for sale. Prices reasonable.
E. S. COWEE, R. F. D. 2, Scranton, Kans.

MAPLE AVENUE HERD **J. U. HOWE,**
Duroc-Jerseys Wichita, Kansas
Farm two miles west of city on Maple Avenue

Crimson Wonder 38755 Herd
Will have something fine to offer. Can furnish trios not akin sired by Crimson Wonder 38755 and Kerr's Champion 25355.
Mr. & Mrs. Henry Shrader, Wauweta, Kas.

Orchard Hill Herd of Duroc-Jerseys.
Some fine summer and fall males for sale. Summer gilts are being bred.
R. F. NORTON & SON, Clay Center, Kas.

Fairview Herds, Duroc and Red Polled
A few spring boars and Red Polled Bull Calves for sale.
J. B. DAVIS, Fairview, Brown Co., Kans.

ROCKDALE'S DUROCS
I am offering my entire crop of spring gilts, fall yearlings, and six tried sows. All bred and safe in pig to Chandler's Wonder Paulina, Improve 34, and Chief Perfection. Write your wants or come and see. Satisfaction guaranteed.
J. F. CHANDLER,
Frankfort, Kansas.

Duroc-Jersey Herd Headers

I have for sale a number of select and growthy males sired by Kansas King, he by Can't Be Beat; dam, Ruby Roy by Keene Gold Coin, high class top-notchers bred by R. C. Watts. Satisfaction guaranteed or no sale.

A. L. BURTON, WICHITA, KAN.

Highland Herd of Duroc-Jersey Swine

Sows by such noted boars as Improver II 13365, Edna 15439, Hunt's Model and Afton by Oom Paul 24. Plenty of fall boars sired by Cole's Duroc 15131, Hunt's Model 20177, Chapin's Duroc and Joe Folk by Belle Chief 24. 20 boars for sale. When writing mention Kansas Farmer.

Grant Chapin, - Green, Kansas

Egypt Valley Durocs
Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts bred to Lora's Lad to farrow in April; will also sell some tried sows. Write for prices and particulars. **H. W. STEINMEYER, Volland, Kas.**

POLAND-CHINAS.

A. AND P. SCHMITZ, ALMA, KANSAS,
Breeder of Poland China Hogs.
We have for sale at reasonable prices 10 gilts bred to Challenger 38349; also a boar pig by Compromise 88204. Write us for prices and full description

Dirigo Breeding Farm

Poland-Chinas for sale of the most fashionable strains. Herd boar, R's Grand Chief, by Grand Chief and out of Kemp's Choice, Perfect Boy and Lucy Choice. 160 head in herd. Write me your wants. Satisfaction or no sale.

J. R. ROBERTS, DEER CREEK, OKLAHOMA

Main's Herd of Poland Chinas

A grand lot of spring and last fall pigs, sired by the great show hog, Empire Chief 30376 out of number one sows. They take on the large size and heavy bone of their sire. Sows including Empire Chief gilts, bred for fall litters to Roller Trust, he by High Roller, the Ohio champion. 240 in herd. Fed for breeders. Priced reasonable. Annual sale October 25.

James Mains, Oskaloosa, Jefferson Co., Kan.

GUS AARON'S POLAND-CHINAS

Route 5, Leavenworth, Kans.
Choice young boars of April and May farrow sired by Beauty's Extension, for sale. Also bred sows and gilts, all with good colors, bone, fancy head and ears. The herd boar, Beauty's Extension 27966, for sale. Some snaps here. Visitors welcome. Mention Kansas Farmer and write for prices.

E. E. Axline's Public Sale of Poland - Chinas

AT
Independence, Mo., April 5, 1906

THIRTY HEAD—10 bred gilts, 10 open gilts, 10 choice young boars. Send for catalogue.

E. E. AXLINE, - Oak Grove, Missouri

Maple Valley Stock Farm

The grand breeder Mo. Chip 24 is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. Have a few more sows and gilts bred for spring farrow at reasonable prices. Correspondence solicited and visitors always welcome.
C. P. BROWN, R. 2, Whiting, Kans.

POLAND-CHINAS.

Kansas Herd of Poland-Chinas has bred gilts and W. R. O. Leghorn cockerels. **F. P. MAGUIRE,** Hutchinson, Kans.

FOR SALE Poland-China Hogs, Holstein-Erie-Cattle, either sex. Best strains represented
H. N. HOLDEMAN, R. R. No. 6, Girard, Kans

ROME PARK POLAND-CHINAS and BERKSHIRE BOARS

A few yearling and winter and spring boars in special offer. Write at once. Also sows, gilts and pigs of either sex. Would take pleasure in showing them to you.
T. A. HUBBARD, (County Treasurer Office), Wellington, Kans.

Elmont Herd of Poland-Chinas

FOR SALE—25 gilts, sired by Faultless Jr., sweepstakes winner at Hutchinson State Fair 1903 and 1904. These gilts are bred to Onward Perfection by Ware's Perfection, out of a dam by Missouri's Black Perfection. Quality and best breeding. Write to
JOHN D. MARSHALL, Walton, Kas

Spring Creek Herd of POLAND-CHINA SWINE

D's Ideal Sunshine and Chief On and On herd breeder. Sows and gilts of choicest breeding bred, for sale, to either Address

G. M. Hebbard,
Route 2, - Peck, Kansas

HIGHLAND FARM HERD OF PEDIGREED POLAND-CHINAS

Twenty serviceable boars at special prices for next 30 days, sired by Black Perfection 37132, Slick Perfection 32604, Perfection Now 32580, and Ideal Perfection. They are lengthy and good-boned pigs, with plenty of flesh. Write me description of what you want and I will guarantee satisfaction.

JOHN BOLLIN, Route 5, Leavenworth, Kan.

200 Head Poland-Chinas

Klevers Perfection 32585, sire of my show herd 1904. For Sale—My best sows are by him. He is near akin to Thick Set, and Keep On, royally bred and a great sire; also, have spring boars and gilts sired by or bred to a son of Mischief Maker or of Corrector for sale.

W. R. PEACOCK, I-2 Mile Sedgwick, Kansas.

POLAND-CHINA Bred Sows

Have a few choice sows bred, mainly Harmonizer gilts bred to Hot Shot. Write at once to

M. S. BABCOCK, Nortonville, Kan.

CHESTER WHITES.

O. I. C. SWINE

Choice young stock of both sexes for sale at very low prices.
S. W. ARTE, Larned, Kans.

World's Fair

CHESTER-WHITE HOGS

Shorthorn cattle, Oxford sheep and Peafowls. I won 13 prizes on 14 head of Chester-Whites at World's Fair, 1904. Four herd boars in use.

W. W. WALTIRE, Peculiar, Mo.

O. I. C. Hogs Scotch Collie Dogs

B. P. Rocks
One hundred grand pups sired by the two greatest stud dogs in the west, Cragmere Wonder and Brandane Noble. We are selling more Collies than any firm in America. Why? Because we have the blood, our prices are moderate, and our dogs are workers as well as blue blooded.

With each Collie sold by us we send a book "The Useful Collie and How to Make Him So." Write at once for they are going fast.

Walnut Grove Farm,
H. D. Nutting, Prop., Emporia, Ks.

PRIZE WINNING O. I. C. SWINE

Sows and gilts bred to Kerr Dick, sire to World's Fair Junior Champion, or by Kerr Dick and bred to other equally good sires. Also fine crop of spring pigs from such sows as Big Mary, grand champion at St. Louis, Kerr Ulna, Silver Mine and others. Headquarters for Boars and Gilts. Write me.

O. L. KERR, Independence, Mo.

FIFTH TERM

JONES' NATIONAL SCHOOL

Auctioneering and Oratory

Davenport, Iowa

5th term opens July 23, 1906. All branches of the work taught. Students now selling in 13 states. For Catalogues write **Carey M. Jones, President**

When writing advertisers please mention this paper.

BERKSHIRES.

EAST RENO BERKSHIRES.

For Sale—One March gilt and choice young boars ready for service; also choice fall pigs, both sexes. All of the famous H. Robinson, Berryton Duke and L. Premier strains. **A. D. Willems, Inman, Kans.**

CEDAR LAWN BERKSHIRES My sows are sired by Elma's Prima 64778, and Berryton Duke 72944. Boar at head of herd, Jourist topper 76277.
Wm. McAdam, Netawaka, Kans.

Ridgeview Berkshires

Seven yearlings for sale, by Forest King 72668. Boars April and May farrow; good ones at reasonable prices. Order quick and get first choice.

MANWARING BROS.,

Route 1, Lawrence, Kan.

SUTTON'S BERKSHIRES

Imported Blood

30 extra choice boars, 100 to 150 pounds. 40 extra choice gilts, 100 to 150 pounds. Fancy heads, strong bone and all-around good ones. Bargains at \$15 to \$25 to close quick.

Chas. E. Sutton, Lawrence, Kas.

My Berkshires

Are the choicest individuals that money can buy, of the most popular families. The sows are of faultless form, and 600 to 800 pounds weight; sired by Lord Premier 50001, Baron Lee 4th 33446, Lord Lee 61138, and Masterpiece 77000, and headed by the best Gentry boars. 100 head choice stock for sale.

E. D. KING, BURLINGTON, KANSAS.

KNOLLWOOD

BERKSHIRES

Pacific Duke 56691, the 1,000 pound champion show and breeding boar from herd of S. B. Wright, Santa Rosa, Cal., bred by N. H. Gentry; Model Princess 60134, by Halle 60125, sweepstakes Pan-American sow; Stumpy Lady 63409 by Combination 56028, sweepstakes Kansas City and Chicago 1902. Lee's Model Princess 62514, the \$180 daughter of Governor Lee 47971; Lady Lee 99th 65035, the \$180 daughter of Lord Premier 50001, and other "Blue-Bloods." Sows bred to 3 grand boars and young stock for sale.

E. W. MELVILLE, Eudora, Kans.

ABERDEEN-ANGUS.

Aberdeen-Angus Cattle

25 Aberdeen-Angus Bulls, 12 months old, average weight 750 pounds. These bulls are full bloods but are not eligible to registration. They are the equal of the bulls in any Aberdeen-Angus herd in the country for all practical purposes.
CHAS. H. BUTLER, Frankfort, Kansas.

THE SUNFLOWER HERD PURE-BRED

Angus Cattle

Herd headed by HALE LAD 3044. Herd numbers 250 head, the largest herd bred by owner in America. Stock for sale at address
FARRISH & MILLER,
Hudson, Route 1, Stafford Co., Kas.

RED POLLS.

ENGLISH RED POLLED CATTLE—Pure-bred Young Stock for Sale. Your orders solicited. Address **L. K. Haseltine, Route 7, Springfield, Mo.** Mention this paper when writing.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.
GEO. GROENMILLER & SON,
ROUTE 1, - POMONA, KANSAS

RED POLLED CATTLE AND POLAND-CHINA SWINE.

Best of breeding. Write or come and see
CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

BEULAH LAND HERD

World's Fair Winning Red Polled Cattle Young Stock for sale.
WILKIE BLAIR, - Girard, Kansas

RED POLLED CATTLE

Of the choicest strains and good individuals. Young animals, either sex, for sale. Also breeders of Percheron Horses, and Plymouth Rock Chickens
Address, S. C. BARTLETT,
Route 5, - - - Wellington, Kansas

HALCYON HOME STOCK FARM

Polled Durhams

Offer some fine blooky bulls about one year old.

C. J. WOODS,

Chiles, Miami County, Kansas

GALLOWAYS.

A choice lot of young bulls and heifers for sale. Come and see them.

O. E. MATSON, FURLEY, KANS.

Breeder of Galloway Cattle

HEREFORDS.

Registered Herefords

Individual merit and choicest breeding. Dale Duplicate 2d at head of herd. Correspondence solicited.
A. JOHNSON, - - Clearwater, Kansas

Vermilion Hereford Co., VERMILION, KANSAS.

Boatman 56011 and Lord Albert 121557 head of herd. Choice young stock of both sexes for sale.

E. E. WOODMAN, Vermillion, Ks.

Modern Herefords

Herd bulls, Protocol 2d 91715—Beau Beauty 192235, and Printer 46634, the best living son of the great Beau Brummel. Young bulls, cows and heifers for sale.

Robt. H. Hazlett, El Dorado, Kans.

SHORTHORNS.

The Biggest and Best Herd of Shorthorns in Southwestern Kansas, owned by
L. A. MEAD,
Kingdawn, Ford County, Kansas
For Sale—Bulls and females. Inspection invited.

ALFALFA LEAF STOCK FARM

JOHN RECHER, Prop., Whitewater, Kans. Breeder of thick-fleshed, early-maturing Shorthorn cattle.
NONPAREIL STAR 188488 at head of herd.

J. L. MILLER & SON, Muscotah, Kansas. Breeders of Shorthorn Cattle.
Six coming yearling bulls for sale at reasonable prices. These animals are Rose of Sharon foundation and are fine individuals and sired by The Champion of Delany, Valley 154859, a son of Gentlemen 126072, he by Red Knight bred by W. A. Harris.

Plainville Shorthorn Herd

Headed by Prince Lucifer 188485.
A pure Scotch bull. Stock for sale at all times.
N. F. SHAW, PLAINVILLE, ROCKS CO., KANS.

MEADOW BROOK SHORTHORNS

Herd headed by Baron Goldsmith 224633, by The Baron 121327; females bred to him and choice young bulls for sale.

T. C. KINGSLEY, Dover, Shawnee County, Kans. Railroad Station, Wilard, Kans. Long Distance Telephone

FOR SALE

110 Head of Pure-bred Shorthorn Cattle
Fifty cows, principally all young and bred to Rosemary Victor 12th 136313 and Waterloo Chief 247541; also 20 bulls, 8 to 18 months old and 45 heifers the same age as the bulls. Mostly all reds. The oldest and one of the best herds in the State of Kansas. Also 40 number 1 Poland-China Sows, mostly all bred and 10 boars, 6 months old. Barred Plymouth Rock eggs for hatching, \$1 a sitting. George Channon, Hope, Kans.

GLENWOOD HERDS Shorthorns and Poland-Chinas

100 Scotch and Scotch-topped females, 8 Scotch-topped bulls in special offer. Pavonia's Prince 207318 and Happy Knight by Gallant Knight 124468 in service.

C. S. NEVIUS, CHILES, MIAMI COUNTY, KANS
Forty miles south of Kansas City.

Valley Grove Shorthorns

FOR SALE—Young bulls, cows, and heifers. Come and see them. Telephone via Dover. Telegraph station Wilard. Address

T. P. BABST & SONS, Auburn, Kans

MILKING SHORTHORNS

Young bulls from heavy-milking dams, sired by the Scotch-topped Giltspur's Knight 171591, whose heifers are excellent milkers. Write us

N. MANROSE

Route 5, - - - Ottawa, Kans.

Soldier Creek Herd of Herefords, Shorthorns, Polled Shorthorns

Service Bulls—Herefords; Columbus 17th 91364, Columbus Bodybody 141838, Jack Hayes 2d 119761. Shorthorns; Orange Dudding 149469. Polled Shorthorns; Scotch Emperor 133646, Crowder 204816. Herds consist of 500 head of the various fashionable families. Can suit any buyer. Visitors welcome except Sundays. Address.
JOSEPH PELTON, Mgr., Belvidere, Kiowa County, Kans.

Rocky Hill Herds

Shorthorns and Percherons.

In special offer a number of Scotch and Scotch-topped females bred to Sultan, a good Scotch bull. Prices reasonable.

J. F. TRUE & SON, Perry, Kans.

R. R. Station Newman, 12 mi. east of Topeka.

SHORTHORNS

Public Sale, April 10, 1906

...40 HEAD...

A. M. Ashcraft, Atchison, Kansas.

When writing advertisers please mention this paper.